

160264	ATU022 204	ATL8C4 9180:2 181..1	gap2	ATCEA4 C51091 1, ATCEA4 C4885_1	86, 85	ATL8C4 9180:2 180..1 67	0.71	g23887 10	54	992	1.3e- 60	proteins [Arabidopsis thaliana]
160265	ATU022 205	ATL8C4 754:44 4..178 0	gap2	ATCEA4 S821	86	ATL8C4 754:47 7..164 4	0.90	g13518 87	53	515	1.9e- 59	ALCOHOL DEHYDR OGENAS E [Malus domestica]
160266	ATU022 206	ATL8C2 9565:1 00..18 48	gap2	ATCEA4 S11505	86	ATL8C2 9565:3 75..18 48	0.71	g41153 62	53	1245	5.3e- 129	(AC005 957) hypothetical protein [Arabidopsis thaliana]
160267	ATU022 207	ATL8C1 0754:1	gap2	ATCEA4 S10557	86, 85	ATL8C1 0754:1	0.65	g24938 10	53	894	2.9e- 75	COPROP ORPHYR

160268	ATU022 208	408..1 45	gap2	ATCEA4 S1592	247..1 089	0.47	g22449 70	53	1487	1.9e- 156	INOGEN III OXIDAS E PRECUR SOR (COPRO PORPHY RINOGE NASE) (COPRO GEN OXIDAS E) [Nicot iana tabacu m]
160269	ATU022 209	ATL8C3 0799:1 047..1	gap2	ATCEA4 S30708	ATL8C3 0799:9 44..16	0.89	g29842 25	52	200	2.7e- 20	(29734 0) hypoth etical protei n [Arabi dopsis thalia na]
160270	ATU022	ATL8S2 0119:1 ..582	gap2	ATCEA4 S34743	ATL8S2 0119:2 4..455	0.79	g45859	52	524	2.5e-	(AE000 766) enolas e- phosph atase E-1 [Aquif ex aeolic us]
		ATL8S1	gap2	ATCEA4	ATL8S1						(AC005

210	101:1. .571		S5821		101:81 ..538		97				55	287) Hypoth etical protei n [Arabi dopsis thalia na]
160271	ATU022 211	ATL8C4 7549:1 ..1535	gap2	ATCEA4 C23892 _1	86	ATL8C4 7549:2 36..14 37	0.61	g31579 26	52	1678	1.8e- 103	(AC002 131) Strong simila rity to extens in- like protei n gb Z34 465 from Zea mays. [Arabi dopsis thalia na]
160272	ATU022 212	ATL8C1 119:16 75..1	gap2	ATCEA4 S126	86	ATL8C1 119:10 09..16 0	0.46	g33778 16	52	369	6.9e- 43	(AF076 275) contai ns simila rity to Arabid opsis thalia na

160273	ATU022 213	ATL8C3 8028:4 844..1 423	gap2	ATCEA4 S11406	86	ATL8C3 8028:4 341..1 423	0.43	g42636 44, g47739 10	52, 33	546, 132	9.6e- 30, 3.9e- 08	retrotransposon Athila (GB:X8 1801) [Arabidopsis thaliana]
160274	ATU022 214	ATL8C1 2183:3 80..11 87	gap2	ATCEA4 S30961	86			g21296 36	52	907	1.1e- 84	lipase - Arabidopsis thaliana [Arabidopsis thaliana]

160275	ATU022 215	ATL8C1 6:756. .1	gap2	ATCEA4 C8643_1	86	ATL8C1 6:756. .23	0.98	g12980 9	51	709	3.6e- 76	dopsis thalia nal PEROXI DASE C2 PRECUR SOR [Armor acia rustic anal]
160276	ATU022 216	ATL8C4 6132:3 633..2 423	gap2	ATCEA4 S11082	86	ATL8C4 6132:3 610..2 423	0.92	g30470 73	51	1156	1.2e- 114	(AF058 825) contai ns simila rity to retrot ranspo son- like protei ns [Arabi dopsis thalia nal]
160277	ATU022 217	ATL8C4 334:83 8..1	gap2	ATCEA4 S8141	86	ATL8C4 334:69 9..26	0.59	g45593 54	50	1514	3.0e- 07	(AC006 585) unknow n protei n [Arabi dopsis thalia nal]
160278	ATU022	ATL8C2	gap2	ATCEA4	86	ATL8C2	0.45	g44552	50	404	1.1e-	(AL035

218	5406:6 53..1		S34635		5406:5 26..28	03	32	440) putative protein [Arabi dopsis thaliana]
160279	ATU022 219	ATL8S1 4226:2 45..51 0	gap2	ATCEA4 C34816 _1	86		182	(AC004 122) Unknown protein [Arabi dopsis thaliana]
160280	ATU022 220	ATL8C3 5030:4 127..1	gap2	ATCEA4 C33365 _1	86	0.70	2742	(AJ224 982) MAP3K epsilone protein kinase [Arabi dopsis thaliana]
160281	ATU022 221	ATL8C4 3793:7 56..15 08	gap2	ATCEA4 S31244 , ATCEA4 C2100 _1	86, 85	0.63	707	(AC002 354) NAD+ dependent isocitrate dehydrogenase

160282	ATU022 222	ATL8C3 185:41 47..55 74	gap2	ATCEA4 C43490 _1	86	ATL8C3 185:44 24..55 45	0.74	g39534 66	48	1173	1.5e- 90	e subuni t 2 [Arabi dopsis thalia na]
160283	ATU022 223	ATL8C3 1165:5 91..1	gap2	ATCEA4 C732_3 , ATCEA4 S32073	86, 83	ATL8C3 1165:2 79..18 5	0.53	g27393 65	48	368	1.9e- 31	(AC002 505) unknow n protei n [Arabi dopsis thalia na]
160284	ATU022 224	ATL8C3 9971:1 222..5 41	gap2	ATCEA4 C30405 _1	86	ATL8C3 9971:9 80..69 4	0.96	g21296 03	47	73	0.62	glycin e/prol ine- rich protei n - Arabid opsis thalia na [Arabi dopsis thalia na]
160285	ATU022	ATL8C4	gap2	ATCEA4	86	ATL8C4	0.94	g37383	47	503	6.4e-	(AC005)

160286	225	4198:1 ..885		S30890		4198:4 09..85 6		20				54	170) putati ve cinnam oyl CoA reduct ase [Arabi dopsis thalia na]
	ATU022 226	ATL8C4 3446:1 184..1	gap2	ATCEA4 C4985- 1	86	ATL8C4 3446:5 24..24 3	0.58	g44172 78	45	1482			(AC007 019) hypoth etical protei n [Arabi dopsis thalia na]
160287	ATU022 227	ATL8C1 005:12 40..62 2	gap2	ATCEA4 S7845	86	ATL8C1 005:94 7..622	0.57	g45389 73	45	429		1.9e- 42	(AL049 487) hypoth etical protei n [Arabi dopsis thalia na]
160288	ATU022 228	ATL8C3 7068:2 409..2 89	gap2	ATCEA4 S34363	86	ATL8C3 7068:2 110..3 00	0.81	g16442 91	44	443			(Z7329 5) recept or- like protei n kinase

160289	ATU022 229	ATL8C1 6431:2 215..1	gap2	ATCEA4 S4078	86	ATL8C1 6431:2 162..3 9	0.47	g45859 27	43	390	1.0e- 32	(AC007 211) putati ve cyclin G- associ ated kinase [Arabi dopsis thalia na]
160290	ATU022 230	ATL8C3 5632:3 58..76 8	gap2	ATCEA4 S5982	86	ATL8C3 5632:4 73..76 2	0.66	g44552 26	42	320	5.0e- 30	(AL035 440) putati ve protei n [Arabi dopsis thalia na]
160291	ATU022 231	ATL8C2 1174:1 ..419	gap2	ATCEA4 C13856 _1	86	ATL8C2 1174:1 43..25 7	0.42	g37860 08	42	100	2.5e- 07	(AC005 499) unknow n protei n [Arabi dopsis thalia na]
160292	ATU022 232	ATL8C4 065:10	gap2	ATCEA4 S2599,	86, 84	ATL8C4 065:97	0.95	g45875 13	41	309	1.4e- 36	(AC007 060)

160293	ATU022 233	ATL8C4 2055:6 32..19 51	gap2	ATCEA4 S34044		4..38	0.92	g12135 36	41	814	4.9e- 81	Contai ns eukary otic protei n kinase domain PF1000 69. [Arabi dopsis thalia na]
160294	ATU022 234	ATL8C3 5469:1 ..1281	gap2	ATCEA4 C11893 5_1		ATL8C3 5469:3 08..11 76	0.57	g39804 11	41	1620	2.7e- 76	(AC004 561) putati ve prolin e-rich protei n [Arabi dopsis thalia na]

160295	ATU022 235	ATL8S2 4789:3 95..1	gap2	ATCEA4 C16352 _1	86					g45875 85	41	195	1.9e- 19	(AC007 232) hypoth etical protei n [Arabi dopsis thalia na]
160296	ATU022 236	ATL8C3 0834:5 11..1	gap2	ATCEA4 C7115_1, ATCEA4 C7115_2	86, 86					g45875 32	40	471	1.8e- 37	(AC007 060) Strong simila rity to F19I3. 2 []
160297	ATU022 237	ATL8C1 822:90 0..1	gap2	ATCEA4 S9427	86	ATL8C1 822:75 1..557				g38591 16	39	174	5.3e- 14	(AF031 609) unknow n [Oryza sativa]
160298	ATU022 238	ATL8C2 5586:1 ..1417	gap2	ATCEA4 S11889	86	ATL8C2 5586:1 41..13 28				g36680 89	39	1295	2.1e- 125	(AC004 667) unknow n protei n [Arabi dopsis thalia na]
160299	ATU022 239	ATL8C1 7450:1 474..1	gap2	ATCEA4 S3937	86	ATL8C1 7450:1 407..1 154				g47739 10	39	218	8.2e- 22	(AF147 259) No defini tion

160300	ATU022 240	ATL8C9 622:77 1..118 4	gap2	ATCEA4 S8361	86						g17699 07	39	321	1.3e- 22	(X9297 5) xylogl ucan endo- transg lycosy lase [Arabi dopsis thalia na]
160301	ATU022 241	ATL8C1 2792:1 ..723	gap2	ATCEA4 S34006	86						g33373 67	39	216	7.1e- 11	(AC004 481) hypoth etical protei n [Arabi dopsis thalia na]
160302	ATU022 242	ATL8C2 0746:7 113..7 950	gap2	ATCEA4 S3937	86						g47739 10	38	287	1.9e- 19	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
160303	ATU022	ATL8C3	gap2	ATCEA4	86, 82	ATL8C3	0.50				g42638	37	278	5.8e-	(AC006)

243	3319:6 547..3 866	3319:6 011..4 346	S3937, ATCEA4 S11406				34		20	067) hypoth etical protei n [Arabi dopsis thalia na]		
160304	ATU022 244	ATL8C4 6069:1 977..1	ATCEA4 S328	gap2	86	ATL8C4 6069:1 977..3 21	0.94	g42635 23	36	908	6.4e- 53	(AC004 044) hypoth etical protei n [Arabi dopsis thalia na]
160305	ATU022 245	ATL8C9 920:73 8..1	ATCEA4 C18271 1, ATCEA4 S2096	gap2	86, 85	ATL8C9 920:73 8..363	0.72	g31691 71	36	466	1.5e- 27	(AC004 401) putati ve serine carbox ypepti dase I [Arabi dopsis thalia na]
160306	ATU022 246	ATL8C1 7535:1 ..1436	ATCEA4 C49551 _1	gap2	86	ATL8C1 7535:7 1..140 6	0.50	g13514 38	36	831	7.0e- 77	XANTHI NE DEHYDR OGENAS E (XD) (CONTA INS: XANTHI NE

160307	ATU022 247	ATL8C9 500:24 13..1	gap2	ATCEA4 C48854 _1	86					g18711 88	35	82	0.050	(U9043 9) Zinc finger protei n 8, ZFP8 [Arabi dopsis thalia nal	OXIDAS E (XO)) [Gallu s gallus]
160308	ATU022 248	ATL8S2 580:1. .434	gap2	ATCEA4 S5518, ATCEA4 C33980 _1	86, 82					g28299 25	34	339	6.0e- 36	(AC002 291) Simila r to dnaj- like protei n, gp Y11 969 22 30757 [Arabi dopsis thalia nal	
160309	ATU022 249	ATL8C3 1832:1 ..552	gap2	ATCEA4 S31801	86					g30803 75	34	763	2.2e- 61	(AL022 580) putati ve protei n [Arabi	

160310	ATU022 250	ATL8C1 5124:1 194..1	gap2	ATCEA4 S14124 , ATCEA4 C369_1	86, 84	ATL8C1 5124:8 50..14 3	0.92	g25117 15	33	1025	2.1e- 108	dopsis thalia na] (AF019 380) putati ve phosph atidyl inosit ol-4- phosph ate 5- kinase [Arabi dopsis thalia na]
160311	ATU022 251	ATL8C3 0503:4 10..82 8	gap2	ATCEA4 S5920	86	ATL8C3 0503:5 22..77 4	0.72	g22621 62	33	289	2.3e- 27	(AC002 329) hypothe tical protei n simila r to A. thalia na protei n F19K23 .19 [Arabi dopsis thalia na]
160312	ATU022 252	ATL8C7 99:908 ..1996	gap2	ATCEA4 S11082	86			g46894 52	33	93	0.013	(AC006 267) putati

160313	ATU022 253	ATL8C3 8059:2 003..9 11	gap2	ATCEA4 C4238_1	86						g41917 89	33	446	1.4e- 24	(AC005 917) putati ve transm embran e transp ort protei n [Arabi dopsis thalia na]
160314	ATU022 254	ATL8C2 4182:2 576..3 610	gap2	ATCEA4 S32387	86						g46626 44	32	774	5.1e- 52	(AC006 429) unknow n protei n [Arabi dopsis thalia na]
160315	ATU022 255	ATL8C4 6107:7 72..27 66	gap2	ATCEA4 S203	86	ATL8C4 6107:7 72..25 53	0.84				g42635 45	31	580	3.3e- 35	(AC006 250) putati ve Athila retro

160316	ATU022 256	ATL8C1 4506:1 ..1605	gap2	ATCEA4 S1306	86	ATL8C1 4506:2 82..16 05	0.54	g23153 62	31	441	1.0e- 41	lement ORF1 protei n [Arabi dopsis thalia nal] (AF016 441) contai ns simila rity to multip le TPR domain s [Caeno rhabdi tis elegan s]
160317	ATU022 257	ATL8C2 627:1. .596	gap2	ATCEA4 S12001	86	ATL8C2 627:14 5..596	0.65	g32490 76	30	538	6.6e- 52	(AC004 473) Simila r to beta glucos idase (bg1A) gbIX94 986 from Maniho t escule nta. [Arabi

160318	ATU022 258	ATL8C2 0822:9 28..1	gap2	ATCEA4 C18612 _1	86	ATL8C2 0822:8 47..69	0.50	g38343 02	30	829	8.9e- 58	dopsis thalia na] (AC005 679) Simila r to gb D45 384 vacuol ar H+- pyroph osphat ase. from Oryza sativa ESTs gb F14 272 and gb F14 273 come from this gene. [Arabi dopsis thalia na]
160319	ATU022 259	ATL8C3 0790:8 23..1	gap2	ATCEA4 C14633 1_1	86	ATL8C3 0790:7 22..16 0	0.40	g44902 97	30	881	3.6e- 91	(AL035 678) putati ve protei n [Arabi dopsis

160320	ATU022 260	ATL8S3 0462:5 62..1	gap2	ATCEA4 C77430 _1	86					g30212 75	30	231	8.3e- 24	thalia na] (AL022 347) putati ve protei n [Arabi dopsis thalia na]
160321	ATU022 261	ATL8C4 802:23 84..12 18	gap2	ATCEA4 S30848	85			ATL8C4 802:23 45..12 18	1.00	g14832 18	100	1793	2.0e- 177	(X9979 3) induce d upon woundi ng stress [Arabi dopsis thalia na]
160322	ATU022 262	ATL8S3 187:42 3..128	gap2	ATCEA4 C28984 1	86			ATL8S3 187:41 9..128	0.99					
160323	ATU022 263	ATL8C1 0256:1 ..853	gap2	ATCEA4 C30157 _1	86			ATL8C1 0256:1 42..85 3	0.98					
160324	ATU022 264	ATL8C1 3222:4 70..12 42	gap2	ATCEA4 S21058	86			ATL8C1 3222:4 70..11 28	0.95					
160325	ATU022 265	ATL8C4 7781:1 ..1166	gap2	ATCEA4 S33279 , ATCEA4 S5167, ATCEA4	86, 85, 85			ATL8C4 7781:1 23..11 59	0.95					

160334	ATU022 274	ATL8C3 8073:7 70..1	gap2	ATCEA4 S3227, ATCEA4 S12911	86, 85	ATL8C3 8073:7 70..68	0.91						g protei n from Brassi ca napus. [Arabi dopsis thalia na]
160335	ATU022 275	ATL8S7 091:54 9..1	gap2	ATCEA4 C1044 5	86	ATL8S7 091:35 0..196	0.91						
160336	ATU022 276	ATL8S3 30:1.. 220	gap2	ATCEA4 C33330 1	86	ATL8S3 30:84. .215	0.90						
160337	ATU022 277	ATL8S2 4976:5 55..38 9	gap2	ATCEA4 S3808	86	ATL8S2 4976:5 06..39 8	0.89						
160338	ATU022 278	ATL8C1 5745:2 ..1021	gap2	ATCEA4 S35283	86	ATL8C1 5745:2 ..870	0.88						
160339	ATU022 279	ATL8C1 6791:3 743..1 516	gap2	ATCEA4 S17879 , ATCEA4 S26288	86, 82	ATL8C1 6791:3 743..1 516	0.88						
160340	ATU022 280	ATL8C3 6891:1 314..5 10	gap2	ATCEA4 S33441	86	ATL8C3 6891:1 314..6 53	0.87						
160341	ATU022 281	ATL8C1 988:16 40..1	gap2	ATCEA4 S23327	86	ATL8C1 988:16 40..31 0	0.87						

160342	ATU022 282	ATL8C2 0421:3 168..2 254	gap2	ATCEA4 S8060	86	ATL8C2 0421:3 121..2 254	0.87				
160343	ATU022 283	ATL8S3 059:38 4..1	gap2	ATCEA4 S33393 , ATCEA4 C43114 1	86, 86	ATL8S3 059:24 0..277	0.87				
160344	ATU022 284	ATL8S1 3066:5 33..11 7	gap2	ATCEA4 S5738	86	ATL8S1 3066:4 76..11 7	0.86				
160345	ATU022 285	ATL8C2 9735:8 9..555	gap2	ATCEA4 S6109	86	ATL8C2 9735:8 9..555	0.86				
160346	ATU022 286	ATL8C3 8703:4 365..2 224	gap2	ATCEA4 S31811	86	ATL8C3 8703:4 299..2 224	0.85				
160347	ATU022 287	ATL8C1 360:61 8..463 9	gap2	ATCEA4 C31199 1	86	ATL8C1 360:61 8..463 9	0.85				
160348	ATU022 288	ATL8S1 1866:3 26..86	gap2	ATCEA4 S4247	86	ATL8S1 1866:3 26..20 1	0.85				
160349	ATU022 289	ATL8C4 4445:1 923..1 5	gap2	ATCEA4 S11539	86	ATL8C4 4445:1 923..1 5	0.85				
160350	ATU022 290	ATL8C1 5897:5 63..1	gap2	ATCEA4 C74638 1, ATCEA4 S34438	86, 85	ATL8C1 5897:5 63..32	0.84				
160351	ATU022 291	ATL8C1 7619:2	gap2	ATCEA4 S36318	86	ATL8C1 7619:2	0.83				

160365	304	1234:1 98..14 45		C11070 71, ATCEA4 S35444		1234:2 05..13 35					
160366	ATU022 305	ATL8C5 844:81 ..704	gap2	ATCEA4 C12556 71	86	ATL8C5 844:81 ..570	0.78				
160367	ATU022 306	ATL8S2 0279:1 ..394	gap2	ATCEA4 C5428_1	86	ATL8S2 0279:6 0..394	0.78				
160368	ATU022 307	ATL8C8 033:10 07..12 2	gap2	ATCEA4 S32749 , ATCEA4 C5837_12	86, 83	ATL8C8 033:98 0..122	0.77				
160369	ATU022 308	ATL8C2 7575:1 038..1 996	gap2	ATCEA4 S2735	86	ATL8C2 7575:1 038..1 996	0.77				
160370	ATU022 309	ATL8C1 7234:1 819..1	gap2	ATCEA4 S12699 , ATCEA4 S370	86, 84	ATL8C1 7234:1 819..1 19	0.77				
160371	ATU022 310	ATL8S5 771:1. ..326	gap2	ATCEA4 C934_1	86	ATL8S5 771:24 2..326	0.77				
160372	ATU022 311	ATL8C2 6104:1 ..265	gap2	ATCEA4 S32514	86	ATL8C2 6104:1 54..32	0.76				
160373	ATU022 312	ATL8C4 2909:1 796..5 70	gap2	ATCEA4 S35834	86	ATL8C4 2909:1 796..5 70	0.75				
160374	ATU022 313	ATL8C3 1669:7 86..27 9	gap2	ATCEA4 C8087_1	86	ATL8C3 1669:7 31..27 9	0.75				
160375	ATU022	ATL8C3	gap2	ATCEA4	86	ATL8C3	0.75				

160383	ATU022 323	14 ATL8C8 091:32 14..11 60	gap2	ATCEA4 C6281_3	85	197 ATL8C8 091:31 06..12 51	0.70	946181 2	100	1257	4.5e- 130	CYTOCH ROME P450 72 (CYPLX XII) (PROBA BLE GERANI OL-10- HYDROX YLASE) (GE10H) [Catha ranthu s roseus]
160384	ATU022 324	ATL8C1 1273:8 1..867	gap2	ATCEA4 C8403_1	86	ATL8C1 1273:8 1..867	0.69					
160385	ATU022 325	ATL8C1 4406:1 708..7 24	gap2	ATCEA4 S3610, ATCEA4 S13040	86, 84	ATL8C1 4406:1 708..9 84	0.68					
160386	ATU022 326	ATL8C5 577:99 1..361	gap2	ATCEA4 S7409	86	ATL8C5 577:99 0..361	0.68					
160387	ATU022 327	ATL8C1 9783:1 11..13 56	gap2	ATCEA4 S36276	86	ATL8C1 9783:2 04..10 13	0.68					
160388	ATU022 328	ATL8C2 0262:1 ..702	gap2	ATCEA4 S35297	86	ATL8C2 0262:5 95..70 2	0.67					
160389	ATU022 329	ATL8C1 303:96	gap2	ATCEA4 C1548	85	ATL8C1 303:96	0.67	924629 25	100	1283	3.0e- 119	(AJ000 053)

			19..57 32		20		17..57 32							GTP cyclohydro- lyase II / 3,4- dihydroxy-2- butanone-4- phosphate synthase [Arabidopsis thaliana]
160390	ATU022 330	gap2	ATL8C1 7458:1 ..955	ATCEA4 C13099 3_1	86	ATL8C1 7458:2 28..95 5	0.67							
160391	ATU022 331	gap2	ATL8C3 5651:1 ..599	ATCEA4 C25101 _1	86	ATL8C3 5651:2 83..59 9	0.67							
160392	ATU022 332	gap2	ATL8C1 3199:1 ..352	ATCEA4 S30745 , ATCEA4 S26347	86, 85	ATL8C1 3199:4 2..348	0.66							
160393	ATU022 333	gap2	ATL8C4 2912:1 735..5 4	ATCEA4 S13008	85	ATL8C4 2912:1 629..3 68	0.66	g45860 48	100	1865	2.3e- 196	(AC007 020) putative polygalacturonase [Arabidopsis thaliana]		

160394	ATU022 334	ATL8C9 615:84 ..1063	gap2	ATCEA4 C17991 _1	86	ATL8C9 615:29 0..104 8	0.65						na]
160395	ATU022 335	ATL8C3 1260:1 ..461	gap2	ATCEA4 C6483 _1	86	ATL8C3 1260:1 31..46 1	0.65						
160396	ATU022 336	ATL8C5 0174:1 067..5 414	gap2	ATCEA4 S27393	85	ATL8C5 0174:1 067..5 414	0.65	g33778 30	100	2305	2.1e- 191	(AF075 598) contai ns simila rity to Aplysi a califo rnica interm ediate filame nt protei n A (GB:X6 0297) [Arabi dopsis thalia na]	
160397	ATU022 337	ATL8C4 7290:8 1..123 5	gap2	ATCEA4 C71299 _1	86	ATL8C4 7290:8 1..108 3	0.65						
160398	ATU022 338	ATL8S1 7933:3 20..1	gap2	ATCEA4 S2034	86	ATL8S1 7933:3 20..37	0.64						
160399	ATU022	ATL8C2	gap2	ATCEA4	86	ATL8C2	0.63						

160408	ATU022 348	ATL8C8 946:56 94..1	gap2	ATCEA4 S23799	85	ATL8C8 946:56 94..58	0.57	g23427 33, g45811 10	100, 45	1943, 1612	6.9e- 174, 4.8e- 161	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
160409	ATU022 349	ATL8C2 4896:5 73..71 5	gap2	ATCEA4 S11875	86	ATL8C2 4896:6 40..71 5	0.56					(AC002 341) hypoth etical protei n [Arabi dopsis thalia na]; (AC005 825) putati ve retrot ranspo son , polypr oteins [Arabi dopsis thalia na]
160410	ATU022 350	ATL8C4 0590:6	gap2	ATCEA4 S11406	86	ATL8C4 0590:4	0.56					

160419	ATU022 359	ATL8S2 6028:2 35..57 5	gap2	ATCEA4 S18138	86	ATL8S2 6028:3 78..26 3	0.47					
160420	ATU022 360	ATL8C3 0033:5 93..89 6	gap2	ATCEA4 C69724 1	86	ATL8C3 0033:8 22..77 9	0.45					
160421	ATU022 361	ATL8C3 6254:1 72..14 59	gap2	ATCEA4 S23477	86	ATL8C3 6254:1 72..14 59	0.44					
160422	ATU022 362	ATL8C4 9939:1 4..285 6	gap2	ATCEA4 C3350 1, ATCEA4 S3045	86, 86	ATL8C4 9939:1 4..285 6	0.44					
160423	ATU022 363	ATL8C1 703:19 ..599	gap2	ATCEA4 C29638 1	86	ATL8C1 703:19 ..590	0.43					
160424	ATU022 364	ATL8C2 2264:5 57..89 2	gap2	ATCEA4 S5556	86	ATL8C2 2264:6 82..85 9	0.41					
160425	ATU022 365	ATL8C2 173:12 73..94	gap2	ATCEA4 S12819	86	ATL8C2 173:12 73..94	0.41					
160426	ATU022 366	ATL8C2 240:43 5..296	gap2	ATCEA4 S253	86							
160427	ATU022 367	ATL8C3 3996:6 45..23 0	gap2	ATCEA4 S1940	86							
160428	ATU022 368	ATL8C4 3018:1 07..1	gap2	ATCEA4 C18251 1	86							
160429	ATU022 369	ATL8C5 0149:3 103..3	gap2	ATCEA4 S30145	86							

[illegible][illegible]

6059

160778	ATU022 718	ATL8C7 825:77 0..187 7	gap2	ATCEA4 S16353	85		ATL8C7 825:77 0..187 7	0.55	g37860 08	99	133	4.9e- 06	dopsis thalia na] (AC005 499) unknown n protei n [Arabi dopsis thalia na]
160779	ATU022 719	ATL8C4 6944:2 57..11 79	gap2	ATCEA4 C11873 5_1	85		ATL8C4 6944:2 57..11 79	0.65	g45843 53	98	112	1.3e- 06	(AC006 420) unknown n protei n [Arabi dopsis thalia na]
160780	ATU022 720	ATL8C4 9882:9 71..1	gap2	ATCEA4 C71369 _1	85				g42042 68	92	1166	9.8e- 94	(AC005 223) 62134 [Arabi dopsis thalia na]
160781	ATU022 721	ATL8C1 68:258 8..548 9	gap2	ATCEA4 S27391	85				g45672 96	91	470		(AC006 918) putati ve Athila retro element ORF1 protei n

160782	ATU022 722	ATL8C1 0469:2 83..20 36	gap2	ATCEA4 C35048 _1	85	ATL8C1 0469:3 55..19 34	0.44	g42042 72	86	2345	[Arabi dopsis thalia na]
160783	ATU022 723	ATL8C7 913:14 35..21 7	gap2	ATCEA4 S5930, ATCEA4 C23745 _1, ATCEA4 S22160	85, 83, 82	ATL8C7 913:12 74..37 9	0.94	g36436 07	83	825	(AC005 395) unknow n protei n [Arabi dopsis thalia na]
160784	ATU022 724	ATL8C2 4277:1 297..1	gap2	ATCEA4 C99068 _1	85	ATL8C2 4277:1 222..2 09	0.83	g45672 61	83	1127	(AC006 841) putati ve NADPH depend ent mannos e 6- phosph ate reduct ase [Arabi dopsis thalia na]

160785	ATU022 725	ATL8C3 1559:1 661..1	gap2	ATCEA4 S28945	85	ATL8C3 1559:1 585..1 07	0.70	g29841 19	83	373	2.7e- 42	na] (AE000 758) peptid e chain releas e factor RF-2 [Aquif ex aeolic us].
160786	ATU022 726	ATL8C8 689:10 01..1	gap2	ATCEA4 S10691	85			g27087 51	83	549	1.4e- 59	(AC003 952) hypoth etical protei n [Arabi dopsis thalia na]
160787	ATU022 727	ATL8C3 1796:7 397..1	gap2	ATCEA4 S27399	85	ATL8C3 1796:5 60..72 , ATL8C3 1796:4 413..1 332, ATL8C3 1796:6 805..4 667	0.94, 0.84, 0.80	g42635 44, g47739 10	78, 67	2793, 362	1.2e- 277, 1.5e- 15	(AC006 250) putati ve Atwila retroee lement ORF1 protei n [Arabi dopsis thalia na]; (AF147 259)

731	285:24 79..1		S203		285:24 79..90		45		100	250) putati ve Athila retroee lement ORF1 protei n [Arabi dopsis thalia na]
160792	ATU022 732	gap2	ATCEA4 C375_3 , ATCEA4 C375_1	85, 82			g23448 90	75	978	8.2e- 84 TINY transc riptio n factor isoloug [Arabi dopsis thalia na]
160793	ATU022 733	gap2	ATCEA4 C56374 _1, ATCEA4 C682_1	85, 83	ATL8C7 411:40 09..55 94	0.51	g37760 11	73	806	6.3e- 79 RNA helica se [Arabi dopsis thalia na]
160794	ATU022 734	gap2	ATCEA4 S26186	85	ATL8C2 6714:2 537..2 37	0.48	g34510 74	73	1105	3.5e- 102 putati ve protei n

160795	ATU022 735	ATL8C9 634:65 68..48 75	gap2	ATCEA4 C853.1	85	ATL8C9 634:65 25..49 14	0.71	g32491 12	69	378	6.7e- 09	[Arabi dopsis thalia na] (AC003 114) Contai ns simila rity to transc riptio n factor Jun-D gb X60 063 from Gallus gallus [Arabi dopsis thalia na]
160796	ATU022 736	ATL8C2 3155:1 ..663	gap2	ATCEA4 S2522	85			g44552 36	66	575	7.1e- 34	(AL035 523) hypoth etical protei n [Arabi dopsis thalia na]
160797	ATU022 737	ATL8C4 243:1. .687	gap2	ATCEA4 S10762	85	ATL8C4 243:23 9..687	0.78	g11611 67	65	444	2.7e- 43	(L4246 6) ethyle ne-

160801	ATU022 741	ATL8C9 882:15 51..1	gap2	ATCEA4 C34674 _1	85	ATL8C9 882:14 90..20 1	0.79	g22528 41	62	1376	1.2e- 130	prote n [Arabi dopsis thalia na]; (AF076 274) contai ns simila rity to revers e transc riptas es (Pfam: rvt.hm m, score: 12.22) [Arabi dopsis thalia na]
160802	ATU022 742	ATL8C3 3970:1	gap2	ATCEA4 S4709	85	ATL8C3 3970:1	0.83	g49268 66	61	720		(AF013 293) No defini tion line found [Arabi dopsis thalia na] (AC007 509)

160807	ATU022 747	ATL8C3 5465:1 ..807	gap2	ATCEA4 S31767	85	ATL8C3 5465:1 32..50 9	0.79	g26659 3	55	192	1.0e- 15	MYROSI NASE MB1 (SINIG RINASE) (THIOG LUCOSI DASE) [Sinap is alba]
160808	ATU022 748	ATL8C2 4261:1 ..2733	gap2	ATCEA4 S12823 ATCEA4 C37954 _1	85, 85	ATL8C2 4261:1 55..27 33	0.75	g33554 77	55	3526	0.0	(AC004 218) putati ve P- glycop rotein , pgpl [Arabi dopsis thalia na]
160809	ATU022 749	ATL8C1 0271:1 ..1485	gap2	ATCEA4 S30695	85	ATL8C1 0271:9 5..963	0.56	g31766 91	55	862		(AC003 671) Contai ns homolo gy to serine /threo nine

160810	ATU022 750	ATL8C2 3844:2 456..1	gap2	ATCEA4 C616_1	85	ATL8C2 3844:2 441..1 07	0.93	g24941 65	54	1376	2.0e- 109	prote n kinase gb X99 618 from Mycoba cteriu m tuberc ulosis ESTs gb F14 403, gb F14 404, and gb N96 730 come from this gene. [Arabi dopsis thalia nal]
												DNA LIGASE (POLYD EOXYRI BONUCL EOTIDE SYNTHA SE (ATP)) [Arabi dopsis thalia

160811	ATU022 751	ATL8C4 1773:1 913..1	gap2	ATCEA4 S27393	85	ATL8C4 1773:1 898..9 9	0.59	g33778 30	54	919	8.8e- 59	na] (AF075 598) contai ns simila rity to Aplysi a califo rnica interm ediate filame nt protei n A (GB:X6 0297) [Arabi dopsis thalia na]
160812	ATU022 752	ATL8C2 0114:8 26..1	gap2	ATCEA4 S1832	85			g22621 71	54	1288		(AC002 329) putati ve RNA/ss DNA- bindin g protei n [Arabi dopsis thalia na]
160813	ATU022 753	ATL8C2 2981:2	gap2	ATCEA4 S11721	85	ATL8C2 2981:1	0.88	g48952 12	53	505	1.6e- 51	(AC007 661)

160814	ATU022 754	ATL8C4 6745:1 ..1514	gap2	ATCEA4 S5468, ATCEA4 S404	85, 82	ATL8C4 6745:6 7..580	0.69	g29613 56	53	804	6.7e- 75	(AL022 140) alcohol dehydr ogenas e like protein [Arabi dopsis thalia na]
160815	ATU022 755	ATL8C3 3877:1 ..670	gap2	ATCEA4 C55630 _1	85			g11611 67	53	272		(L4246 6) ethylene- formin g enzyme [Picea glauca]
160816	ATU022 756	ATL8C8 816:1. .1021	gap2	ATCEA4 C661_1	85			g81629	53	1167	0.012	glycin e-rich protein atGRP- 7 - Arabid opsis thalia

160817	ATU022 757	ATL8C1 5710:1 ..1061	gap2	ATCEA4 C39083 1, ATCEA4 C73563 _1	85, 83					g39158 42	52	126	3.7e- 13	RAS- RELATE D PROTEI N RAB11A [Arabi dopsis thalia na]
160818	ATU022 758	ATL8S2 0590:5 56..1	gap2	ATCEA4 C13247 _1	85	ATL8S2 0590:4 61..12 9	0.68			g23179 11	51	307	6.1e- 25	(U8995 9) simila r to GTP- bindin g protei n [Arabi dopsis thalia na]
160819	ATU022 759	ATL8C4 5083:3 57..31 06	gap2	ATCEA4 S203	85	ATL8C4 5083:3 57..26 70, ATL8C4 5083:3 059..2 945	0.94, 0.54			g33778 16	50	1712	1.9e- 189	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot

160820	ATU022 760	ATL8S2 868:74 6..1	gap2	ATCEA4 S405	85	ATL8S2 868:70 3..93	0.98	g31525 75	49	439	1.1e- 46	ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
160821	ATU022 761	ATL8C4 258:1. .354	gap2	ATCEA4 C9180_1, ATCEA4 C9180_2	85, 84	ATL8C4 258:45 ..335	0.49	g11731 87	49	301	1.4e- 28	40S RIBOSO MAL PROTEI N S23 (S12) [Fraga

160822	ATU022 762	ATL8C4 7705:7 33..1	gap2	ATCEA4 C6239_1	85							g45899 74	49	591	3.2e- 48	ria x ananas sa] (AC007 195) unknown protein [Arabi dopsis thalia na]
160823	ATU022 763	ATL8C1 5587:1 ..568	gap2	ATCEA4 C20476 _1	85							g39804 18	49	258	1.7e- 19	(AC004 561) putative tropin one reductase [Arabi dopsis thalia na]
160824	ATU022 764	ATL8C2 0746:1 ..888	gap2	ATCEA4 S203	85							g42635 45	48	1033	6.7e- 54	(AC006 250) putative Athila retroelement ORF1 protein [Arabi dopsis thalia na]
160825	ATU022	ATL8C2	gap2	ATCEA4	85, 84	ATL8C2	0.89					g38343	47	1367	1.2e-	(AC005

765	0790:7 4..214 0	C3740_1, ATCEA4 C18612 _1	0790:7 4..200 0	02	86	679) Simila r to gb D45 384 vacuol ar H+- pyroph osphat ase from Oryza sativa . ESTs gb F14 272 and gb F14 273 come from this gene. [Arabi dopsis thalia na]
160826	ATU022 766	gap2	ATL8C2 9687:8 89..34 5	0.77	769	6.2e- 78 <

160828	ATU022 768	ATL8C3 8061:2 043..2 432	gap2	ATCEA4 S16368	85		8					g33416 85	47	70	0.65	protein- associated phospho- protein in Dr1 - Arabid opsis thalia na []
160829	ATU022 769	ATL8C8 885:70 7..291 2	gap2	ATCEA4 S437	85							g36680 83	47	130	1.7e- 06	(AC004 667) hypoth etical protein [Arabi dopsis thalia na]
160830	ATU022 770	ATL8C1 7098:4 56..15 65	gap2	ATCEA4 C56374 _1	85		ATL8C1 7098:4 56..14 76	0.75				g36874 76	46	274	2.3e- 29	(AL031 786) putati ve atp depend ent rna helica

160831	ATU022 771	ATL8C3 3128:1 466..2 320	gap2	ATCEA4 S203	85	ATL8C3 3128:1 501..2 252	0.46	g42635- 45	46	1006	3.9e- 96	se [Schiz osacch aromyc es pombel] (AC006 250) putati ve Athila retroe lement ORF1 protei n [Arabi dopsis thalia na]
160832	ATU022 772	ATL8C5 983:75 6..8	gap2	ATCEA4 C72820 _1	85	ATL8C5 983:42 5..12	0.43	g22448 05	46	157		(Z9733 6) hypoth etical protei n [Arabi dopsis thalia na]
160833	ATU022 773	ATL8C1 2184:1 ..1231	gap2	ATCEA4 S7450	85			g16193 00	46	236	1.7e- 24	(X9526 9) LRR protei n [Lycop ersico n escule ntum]
160834	ATU022	ATL8C1	gap2	ATCEA4	85, 85	ATL8C1	0.74	g37859	44	249	7.8e-	(AC005

774	1494:6 26..1		S11790 , ATCEA4 C66246 _1		1494:1 57..65		99		29	499) putati ve peptid yl- prolyl cis- trans isomer ase [Arabi dopsis thalia na]	
160835	ATU022 775	ATL8C4 3855:1 193..1	gap2	ATCEA4 C17077 _1	85	ATL8C4 3855:1 008..1 16	0.55	g45393 01	43	652	(AL049 480) putati ve mitoch ondria l protei n [Arabi dopsis thalia na]
160836	ATU022 776	ATL8C5 782:70 6..81	gap2	ATCEA4 S23796	85	ATL8C5 782:42 0..108	0.49	g49268 20	43	209	(AC004 135) T17H7. 5 [Arabi dopsis thalia na]
160837	ATU022 777	ATL8C1 5338:1 ..856	gap2	ATCEA4 C84204 _1	85			g44688 05	43	1206	(AL035 601) auxin- respon sive

160838	ATU022 778	ATL8C2 0141:1 ..618	gap2	ATCEA4 S34582	85		ATL8C2 0141:7 ..618	0.55	g38927 15	41	190		GH3- like protein [Arabi dopsis thalia na]
160839	ATU022 779	ATL8C3 1009:4 94..12 15	gap2	ATCEA4 S2714	85		ATL8C3 1009:4 94..10 06	0.54	g21911 42	41	952	1.6e- 92	(AL033 545) hypoth etical protein [Arabi dopsis thalia na]
160840	ATU022 780	ATL8C1 5742:5 83..1	gap2	ATCEA4 C80181 _1	85				g41057 98	41	146	7.9e- 16	(AF049 930) PGP237 -11 [Petun ia x hybrid a]
160841	ATU022 781	ATL8C4 1079:8 45..1	gap2	ATCEA4 C6762 _1	85				g46783 20	41	975	9.6e- 98	(AL049 658) hypoth

160842	ATU022 782	ATL8C1 1944:1 ..2043	gap2	ATCEA4 C62031 _1	85	ATL8C1 1944:8 6..202 7	0.98	g27393 71	40	910	3.7e- 67	etical protei n [Arabi dopsis thalia na]
160843	ATU022 783	ATL8C3 4213:9 08..18	gap2	ATCEA4 S29681	85	ATL8C3 4213:7 44..18	0.54	g62959 2	40	186	8.1e- 11	hypoth etical protei n - rape []
160844	ATU022 784	ATL8C1 7614:1 063..1 49	gap2	ATCEA4 S26000 , ATCEA4 C54462 _2	85, 82	ATL8C1 7614:6 06..37 4	0.42	g44552 03	40	309	4.2e- 30	(AL035 440) putati ve protei n [Arabi dopsis thalia na]
160845	ATU022 785	ATL8C4 6769:2 72..13 40	gap2	ATCEA4 S2714	85			g21911 42	39	1206	8.1e- 120	(AF007 269) A IG00 2N01.2 7 gene produc t

160846	ATU022 786	ATL8C9 61:191 ..504	gap2	ATCEA4 S13987	85	ATL8C9 61:192 ..472	0.76	g45859 77	36	284	1.1e- 30	[Arabi dopsis thalia na] (AC005 287) Unknow n protei n [Arabi dopsis thalia na]
160847	ATU022 787	ATL8C3 813:1. .979	gap2	ATCEA4 C74591 _1	85	ATL8C3 813:95 ..963	0.93	g30969 49, g30969 47	35, 35	180, 181	1.8e- 11, 1.6e- 11	(Y1632 8) putati ve cyclic nucleo tide- regula ted ion channe l [Arabi dopsis thalia na]; (Y1632 7) putati ve cyclic nucleo tide- regula ted ion

160848	ATU022 788	ATL8C2 3819:1 ..1452	gap2	ATCEA4 S34816	85	ATL8C2 3819:5 71..10 33, ATL8C2 3819:1 420..1 283	0.60, 0.93	g22447 85	35	571	5.2e- 56	(Z9733 5) hypoth etical protei n [Arabi dopsis thalia na]
160849	ATU022 789	ATL8C6 637:1. .1909	gap2	ATCEA4 C35810 _2	85			g45845 39	35	327	1.2e- 29	(AL049 608) extens in- like protei n [Arabi dopsis thalia na]
160850	ATU022 790	ATL8C1 7062:1 ..595	gap2	ATCEA4 C12989 _1	85			g24649 01	35	334	4.5e- 28	(Z9970 8) putati ve protei n [Arabi dopsis thalia na]
160851	ATU022 791	ATL8C1 0962:6 95..12	gap2	ATCEA4 S23796	85			g49268 20	35	205	2.4e- 17	(AC004 135) T17H7.

160852	ATU022 792	ATL8C1 9055:1 184..7 39	gap2	ATCEA4 C15314 6_1	85	ATL8C1 9055:1 106..7 39	0.88	g22390 89	34	293	5.1e- 28	5 [Arabi dopsis thalia na]
160853	ATU022 793	ATL8C1 9220:9 70..1	gap2	ATCEA4 S826	85	ATL8C1 9220:4 38..2	0.84	g62966 9	34	179	1.9e- 19	(Z8438 6) antra nilate N- hydrox ycinna moyl/b enzoyl transf erases [Diant hus caryop hyllus]
160854	ATU022 794	ATL8C4 9743:1 ..571	gap2	ATCEA4 S31434	85			g30803 54	34	338	2.5e- 30	(AL022 580) hypoth etical protei n - tomato []
160855	ATU022 795	ATL8C3 5891:1 ..675	gap2	ATCEA4 C23797 1	85			g45443 87	34	637	1.3e- 47	[Arabi dopsis thalia na] (AC007 047) putati

160856	ATU022 796	ATL8C4 1977:2 982..1	gap2	ATCEA4 S203	85							g42638 31, g42635 45	34, 32	1618, 539	6.3e- 158, 4.9e- 44	(AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia na]; (AC006 250) putati ve Athila retroe lement ORF1 protei n [Arabi dopsis thalia na] (AC006 136)
160857	ATU022 797	ATL8C2 1194:1	gap2	ATCEA4 C46403	85	ATL8C2 1194:4	0.91	g42636 53	33	179	6.1e- 07					(AC006 136)

160858	ATU022 798	..1173	gap2	ATCEA4 S860	85	65..11 73	0.78	g44552 24	33	2842	1.4e- 293	hypothetical protein [Arabidopsis thaliana] (AL035440) putative protein [Arabidopsis thaliana]
160859	ATU022 799	ATL8S3 23:673 ..1	gap2	ATCEA4 S12916	85	ATL8S3 23:365 ..73	0.76	g31281 93	33	128	5.1e- 05	hypothetical protein [Arabidopsis thaliana] (AC004521)
160860	ATU022 800	ATL8S2 6010:3 49..1	gap2	ATCEA4 C964_1	85	ATL8S2 6010:1 54..26 5	0.88	g11691 99	32	252	2.4e- 21	DNA-DAMAGE - REPAIR /TOLERATION PROTEIN DRT102 [Arabidopsis thaliana]

160861	ATU022 801	ATL8C1 568:15 29..11 5	gap2	ATCEA4 S11615	85	ATL8C1 568:13 01..23 6	0.56	g33353 47	32	646	1.2e- 44	nal (AC004 512) Contai ns simila rity to ARI, RING finger protei n gb X98 309 from Drosop hila melano gaster . ESTs gb T44 383, gb W43 120, gb N65 868, gb H36 013, gb AA0 42241, gb T76 869 and gb AA0 42359 come from this
--------	---------------	---------------------------------	------	------------------	----	---------------------------------	------	--------------	----	-----	-------------	---

160862	ATU022 802	ATL8C4 2879:1 ..1123	gap2	ATCEA4 C15168 0_1	85						g43888 34	32	436	3.7e- 42	(AC006 528) putati ve diseas e resist ance protei n RPP1, 3', partia l [Arabi dopsis thalia na]
160863	ATU022 803	ATL8C1 6629:1 ..1292	gap2	ATCEA4 S12281	85	ATL8C1 6629:1 12..12 92	0.80	g31766 59	31	1022	6.3e- 106	(AC004 393) Strong simila rity to recept or kinase gb M80 238 from A. thalia na. [Arabi dopsis			

160864	ATU022 804	ATL8C4 7576:3 46..1	gap2	ATCEA4 C6502_1	85							g21911 77	31	225	7.0e- 08	thalia na] (AF007 270) belong s to the SPOU family of rRNA methyl ases. [Arabi dopsis thalia na]
160865	ATU022 805	ATL8C1 1715:1 ..1031	gap2	ATCEA4 S33299	85							g36680 93	31	209	1.7e- 19	(AC004 667) unknow n protei n [Arabi dopsis thalia na]
160866	ATU022 806	ATL8S7 374:1. .315	gap2	ATCEA4 S9436	85					ATL8S7 374:69 ..300	0.47	g49143 41	30	343	1.4e- 32	(AC005 489) F14N23 .27 [Arabi dopsis thalia na]
160867	ATU022 807	ATL8C4 9103:8 7..596	gap2	ATCEA4 C29197 1	85					ATL8C4 9103:9 0..535	1.00					
160868	ATU022 808	ATL8S2 2125:3	gap2	ATCEA4 C26442	85					ATL8S2 2125:3	0.99					

160878	ATU022 818	ATL8C2 2642:5 52..1	gap2	ATCEA4 S18339	85	ATL8C2 2642:4 49..16 9	0.95					
160879	ATU022 819	ATL8C6 936:17 02..13 32	gap2	ATCEA4 C13330 _1	85	ATL8C6 936:15 78..13 79	0.95					
160880	ATU022 820	ATL8C4 6361:8 77..23 1	gap2	ATCEA4 C22047 _1	85	ATL8C4 6361:8 77..26 0	0.95					
160881	ATU022 821	ATL8C3 0270:1 036..5 87	gap2	ATCEA4 S12521	85	ATL8C3 0270:9 97..65 7	0.94					
160882	ATU022 822	ATL8S4 924:1. 544	gap2	ATCEA4 S6553	85	ATL8S4 924:31 ..544	0.94					
160883	ATU022 823	ATL8C1 1690:2 32..27 36	gap2	ATCEA4 S6796	85	ATL8C1 1690:2 32..27 36	0.93					
160884	ATU022 824	ATL8C2 517:67 0..14	gap2	ATCEA4 S1951	85	ATL8C2 517:61 9..14	0.93					
160885	ATU022 825	ATL8C4 9037:1 919	gap2	ATCEA4 S443	85	ATL8C4 9037:2 ..919	0.92					
160886	ATU022 826	ATL8C3 1726:4 09..13 60	gap2	ATCEA4 S13040 , ATCEA4 S11274	85, 82	ATL8C3 1726:4 09..11 27	0.92					
160887	ATU022 827	ATL8C1 1870:1 02..13 76	gap2	ATCEA4 S25956	85	ATL8C1 1870:1 02..11 03	0.92					
160888	ATU022 828	ATL8C3 7202:5	gap2	ATCEA4 S4334	84	ATL8C3 7202:5	0.91	g32128 63	100	1320		(AC004 005)

160895	834	423:1. .362		S32057		423:44 ..347						
	ATU022 835	ATL8C1 3547:8 8..241 2	gap2	ATCEA4 S11328	85	ATL8C1 3547:2 412..8 8	0.88					
160896	ATU022 836	ATL8C7 026:63 7..115	gap2	ATCEA4 C45397 1	85	ATL8C7 026:59 4..115	0.87					
160897	ATU022 837	ATL8C1 2038:2 ..1816	gap2	ATCEA4 C78702 1	85	ATL8C1 2038:2 ..1754	0.87					
160898	ATU022 838	ATL8C4 9752:3 338..2 310	gap2	ATCEA4 S400, ATCEA4 S12635	85, 83	ATL8C4 9752:3 095..2 310	0.87					
160899	ATU022 839	ATL8C2 819:14 53..15 3	gap2	ATCEA4 S31574	85	ATL8C2 819:14 08..15 3	0.86					
160900	ATU022 840	ATL8C1 1999:2 7..326 3	gap2	ATCEA4 C11992 0_1	85	ATL8C1 1999:2 7..326 3	0.86					
160901	ATU022 841	ATL8C3 6116:4 20..17 59	gap2	ATCEA4 C6666_ 1	85	ATL8C3 6116:4 20..17 59	0.86					
160902	ATU022 842	ATL8C4 6897:3 160..1 23	gap2	ATCEA4 S29657	85	ATL8C4 6897:3 160..1 23	0.86					
160903	ATU022 843	ATL8S1 33:468 ..1	gap2	ATCEA4 S902	85	ATL8S1 33:454 ..293	0.85					
160904	ATU022 844	ATL8C1 855:14 47..28 77	gap2	ATCEA4 S5833	85	ATL8C1 855:14 47..28 77	0.85					
160905	ATU022	ATL8C3	gap2	ATCEA4	84,	ATL8C3	0.85	g26217	100	296	1.8e-	(AE000

	845	1058:2 562..3 4		S1326, ATCEA4 S34434 , ATCEA4 C73963 _1	83, 82	1058:2 562..2 34		67		24	848) conser ved protei n [Metha nobact erium thermo autotr ophicu m]
160906	ATU022 846	ATL8C5 73:121 ..872	gap2	ATCEA4 S30750	85	ATL8C5 73:124 ..872	0.84				
160907	ATU022 847	ATL8C1 3137:4 236..1 385	gap2	ATCEA4 S7704	85	ATL8C1 3137:4 236..1 385	0.84				
160908	ATU022 848	ATL8C4 0161:3 10..34	gap2	ATCEA4 S5540	85	ATL8C4 0161:3 10..45	0.84				
160909	ATU022 849	ATL8C2 8072:3 27..12 38	gap2	ATCEA4 S7622	85	ATL8C2 8072:3 27..11 60	0.84				
160910	ATU022 850	ATL8S7 60:41. .221	gap2	ATCEA4 C5036_1	85	ATL8S7 60:67. .163	0.82				
160911	ATU022 851	ATL8C3 2356:3 2..132 6	gap2	ATCEA4 C605_1	85	ATL8C3 2356:6 2..121 2	0.82				
160912	ATU022 852	ATL8C2 0299:7 15..14 11	gap2	ATCEA4 C13133 5_1	85	ATL8C2 0299:7 15..88 3	0.82				
160913	ATU022 853	ATL8C3 2846:3 127..4	gap2	ATCEA4 S16097	85	ATL8C3 2846:3 127..4	0.82				

160922	ATU022 862	ATL8C1 616:21 6..216 1	gap2	ATCEA4 S81	84	ATL8C1 616:29 9..216 1	0.80	g45672 96	100	2352	8.0e- 191	protein [Arabi dopsis thalia na] (AC006 918) putati ve Athila retro element ORF1 protein [Arabi dopsis thalia na]
160923	ATU022 863	ATL8C1 865:47 3..191 1	gap2	ATCEA4 S3262	84	ATL8C1 865:50 9..191 1	0.80	g26421 59	100	1531	1.2e- 163	(AC003 000) putati ve mannos e-1- phosph ate guanyl transf erase [Arabi dopsis thalia na]
160924	ATU022 864	ATL8C3 0666:1 591..6 12	gap2	ATCEA4 S1519	85	ATL8C3 0666:1 444..6 12	0.80					
160925	ATU022	ATL8C3	gap2	ATCEA4	85, 82	ATL8C3	0.79					

160926	865	0932:6 97..31 7	S35300 , ATCEA4 S36305		0932:6 97..57 0							
	ATU022 866	ATL8C2 2910:1 ..1258	gap2	ATCEA4 S16130	85	ATL8C2 2910:3 3..125 8	0.79					
160927	ATU022 867	ATL8C2 9277:1 33..17 69	gap2	ATCEA4 S6304	84	ATL8C2 9277:2 09..17 69	0.78	114	100	gl0711 2	0.84	mucin, trache al (AMN- 22) - human (fragm ent) []
160928	ATU022 868	ATL8C4 6680:9 0..130 3	gap2	ATCEA4 S11628	85	ATL8C4 6680:1 303..9 0	0.78					
160929	ATU022 869	ATL8C1 1442:3 87..63 0	gap2	ATCEA4 S1129	85	ATL8C1 1442:3 87..63 0	0.78					
160930	ATU022 870	ATL8C4 6269:5 83..1	gap2	ATCEA4 S29496	85	ATL8C4 6269:5 39..23 3	0.77					
160931	ATU022 871	ATL8C3 9890:4 62..11 02	gap2	ATCEA4 S344	85	ATL8C3 9890:4 62..11 02	0.74					
160932	ATU022 872	ATL8S9 847:17 3..454	gap2	ATCEA4 C6295_1	85	ATL8S9 847:31 2..390	0.72					
160933	ATU022 873	ATL8C4 6915:9 31..44 6	gap2	ATCEA4 C11734 5_1	85	ATL8C4 6915:9 00..47 3	0.72					

160934	ATU022 874	ATL8C3 9016:1 22..37 4	gap2	ATCEA4 C732_3	85	ATL8C3 9016:1 25..37 4	0.71					
160935	ATU022 875	ATL8C1 5434:7 00..1	gap2	ATCEA4 S2909	85	ATL8C1 5434:7 00..15 0	0.70					
160936	ATU022 876	ATL8C3 0395:1 24..14 71	gap2	ATCEA4 S8689	85	ATL8C3 0395:1 73..14 71	0.70					
160937	ATU022 877	ATL8C6 257:51 9..169 1	gap2	ATCEA4 C43870 _1	85	ATL8C6 257:51 9..167 7	0.69					
160938	ATU022 878	ATL8C1 577:15 93..42 62	gap2	ATCEA4 C21292 _1	84	ATL8C1 577:29 41..42 22	0.69	g48368 97	100	1627	5.6e- 121	(AC007 369) Hypoth etical protei n [Arabi dopsis thalia na]
160939	ATU022 879	ATL8C1 7457:1 ..1348	gap2	ATCEA4 S8118	85	ATL8C1 7457:3 72..13 48	0.69					
160940	ATU022 880	ATL8C3 9184:1 ..623	gap2	ATCEA4 C74638 _1	85	ATL8C3 9184:3 12..60 3	0.69					
160941	ATU022 881	ATL8C1 1366:1 ..870	gap2	ATCEA4 C18601 _1, ATCEA4 S30509 ,	85, 83, 82	ATL8C1 1366:1 93..87 0	0.68					

160942	ATU022 882	ATL8C3 5728:1 765..9 53	gap2	ATCEA4 C18601 3	85	ATL8C3 5728:1 566..1 155	0.66										
160943	ATU022 883	ATL8S1 217:27 9..623	gap2	ATCEA4 S4078	85	ATL8S1 217:27 9..587	0.65										
160944	ATU022 884	ATL8C2 1438:1 868..3 07	gap2	ATCEA4 C46238 1	85	ATL8C2 1438:1 545..3 07	0.65										
160945	ATU022 885	ATL8C1 4442:1 892..3 74	gap2	ATCEA4 C45442 1	85	ATL8C1 4442:1 693..4 39	0.64										
160946	ATU022 886	ATL8C4 112:77 4..1	gap2	ATCEA4 C369_1	85	ATL8C4 112:62 8..103	0.62										
160947	ATU022 887	ATL8C8 856:20 28..16 13	gap2	ATCEA4 S10526	85	ATL8C8 856:19 65..16 13	0.62										
160948	ATU022 888	ATL8C3 1909:6 11..31 97	gap2	ATCEA4 C83_2, ATCEA4 S17308	85, 82	ATL8C3 1909:3 197..6 11	0.61										
160949	ATU022 889	ATL8C1 1249:8 63..1	gap2	ATCEA4 C397_1	85	ATL8C1 1249:5 58..24 0	0.61										
160950	ATU022 890	ATL8S2 345:91 ..548	gap2	ATCEA4 C85172 1	85	ATL8S2 345:91 ..387	0.58										
160951	ATU022 891	ATL8C4 6820:6 78..1	gap2	ATCEA4 C704_1	85	ATL8C4 6820:5 73..19 7	0.58										

160952	ATU022 892	ATL8C6 825:72 3..145 0	gap2	ATCEA4 S29564	85	ATL8C6 825:72 3..145 0	0.56	g47739 20, g47739 10	100, 40	2634, 208	8.0e- 256, 7.9e- 18	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia nal; (AF147 259) No defini tion line found [Arabi dopsis thalia nal]
160953	ATU022 893	ATL8C7 917:41 8..659 5	gap2	ATCEA4 S179	84	ATL8C7 917:41 8..659 5	0.55	g45672 96	100	2324		(AC006 918) putati ve Athila retro element ORF1 protei n [Arabi dopsis thalia nal]
160954	ATU022 894	ATL8C3 3880:3 922..1 85	gap2	ATCEA4 S81	84	ATL8C3 3880:3 922..1 85	0.55					

160955	ATU022 895	ATL8C3 4746:5 35..63 9	gap2	ATCEA4 S14285	85	ATL8C3 4746:5 35..63 9	0.55						
160956	ATU022 896	ATL8C8 802:10 6..212 8	gap2	ATCEA4 S7927	85	ATL8C8 802:10 6..212 8	0.54						
160957	ATU022 897	ATL8C4 0375:6 15..78 1	gap2	ATCEA4 S10674	85	ATL8C4 0375:6 38..75 7	0.52						
160958	ATU022 898	ATL8S3 889:13 7..422	gap2	ATCEA4 C20197 1, ATCEA4 S18447	85, 84	ATL8S3 889:13 7..382	0.51						
160959	ATU022 899	ATL8C1 0028:5 32..14 59	gap2	ATCEA4 S20806	85	ATL8C1 0028:1 459..5 32	0.51						
160960	ATU022 900	ATL8C1 376:88 6..244	gap2	ATCEA4 S4021	84	ATL8C1 376:87 5..338	0.50	g45824 54	100	741	1.5e- 73	(AC007 071) hypoth etical protei n [Arabi dopsis thalia na]	
160961	ATU022 901	ATL8C6 031:73 5..150	gap2	ATCEA4 C793 2 - , ATCEA4 S35298 , ATCEA4 S34204 ,	85, 83, 83, 82	ATL8C6 031:18 4..521	0.49						

160972	ATU022 912	ATL8C3 359:26 .376	gap2	ATCEA4 S32459	85															
160973	ATU022 913	ATL8S2 8161:1 .237	gap2	ATCEA4 S8243	85															
160974	ATU022 914	ATL8C9 477:70 0..296	gap2	ATCEA4 S12209	85															
160975	ATU022 915	ATL8C9 509:89 4..755	gap2	ATCEA4 S12262	85															
160976	ATU022 916	ATL8C9 654:1. .450	gap2	ATCEA4 S29619	85															
160977	ATU022 917	ATL8C2 9956:1 52..1	gap2	ATCEA4 C6153 1	85															
160978	ATU022 918	ATL8S2 722:45 8..251	gap2	ATCEA4 S29720	85															
160979	ATU022 919	ATL8C9 948:25 24..22 11	gap2	ATCEA4 S30338	85															
160980	ATU022 920	ATL8C1 4453:3 317..2 947	gap2	ATCEA4 S12439	85															
160981	ATU022 921	ATL8C9 962:44 7..273	gap2	ATCEA4 S2542	85															
160982	ATU022 922	ATL8S2 7102:8 2..544	gap2	ATCEA4 S34514	85															
160983	ATU022 923	ATL8S1 0109:4 45..33 2	gap2	ATCEA4 S14662	85															

161013	ATU022 953	..3270	gap2	ATCEA4 C13033 1	85				g47739 08	2.9e- 174	putative Athila retroel ement ORF1 protein [Arabi dopsis thalia na]; (AF147 259) No defini tion line found [Arabi dopsis thalia na]
161014	ATU022 954	ATL8C2 8681:1 ..290 ATL8C4 8971:1 334..1 463	gap2	ATCEA4 C5756 1	85						
161015	ATU022 955	ATL8S2 005:47 1..195	gap2	ATCEA4 C95665 1	85						
161016	ATU022 956	ATL8S2 4581:1 ..491	gap2	ATCEA4 C255_1	85						
161017	ATU022 957	ATL8C4 4516:3 02..46 7	gap2	ATCEA4 S1293	85						

161018	ATU022 958	ATL8C1 256:61 1..103	gap2	ATCEA4 S27972	85														
161019	ATU022 959	ATL8S1 5169:2 29..56 3	gap2	ATCEA4 C6715_1	85														
161020	ATU022 960	ATL8C3 684:15 59..19 16	gap2	ATCEA4 S11406	85														
161021	ATU022 961	ATL8C2 4859:1 ..116	gap2	ATCEA4 S31857	85														
161022	ATU022 962	ATL8C1 1274:2 402..2 121	gap2	ATCEA4 S344	85														
161023	ATU022 963	ATL8C3 4980:1 660..1 387	gap2	ATCEA4 C92338_1	85														
161024	ATU022 964	ATL8C2 1994:3 43..12 1	gap2	ATCEA4 S30556	85														
161025	ATU022 965	ATL8C3 2370:4 10..25 4	gap2	ATCEA4 S11817	85														
161026	ATU022 966	ATL8C2 43:83. ..1	gap2	ATCEA4 S1760	85														
161027	ATU022 967	ATL8C2 4837:8 0..1	gap2	ATCEA4 S3937	85														
161028	ATU022 968	ATL8C1 7089:1 ..382	gap2	ATCEA4 S203	85														
161029	ATU022	ATL8C9	gap2	ATCEA4	85														

[illegible]

161052	ATU022 992	343..2 430 ATL8C4 0212:9 28..17 8	gap2	ATCEA4 S178, ATCEA4 S253, ATCEA4 S11510	85, 85, 83														
161053	ATU022 993	ATL8C9 908:10 19..87 1	gap2	ATCEA4 C2803- 1	85														
161054	ATU022 994	ATL8C2 1416:1 255..9 55	gap2	ATCEA4 S25028	85														
161055	ATU022 995	ATL8C3 3373:4 20..29 6	gap2	ATCEA4 S178	85														
161056	ATU022 996	ATL8S2 2722:5 45..24 9	gap2	ATCEA4 S11284	85														
161057	ATU022 997	ATL8C3 7768:3 030..2 570	gap2	ATCEA4 S14088	85														
161058	ATU022 998	ATL8C1 2654:6 05..42 1	gap2	ATCEA4 S26702	85														
161059	ATU022 999	ATL8S1 8148:1 25..1	gap2	ATCEA4 S18184 , ATCEA4 S28947	85, 83														
161060	ATU023 000	ATL8C3 4164:1 813..8	gap2	ATCEA4 S14600	85														

161083	ATU023 023	ATL8S7 877:69 ..171	gap2	ATCEA4 C19193 2	85												
161084	ATU023 024	ATL8S2 4524:9 7..1	gap2	ATCEA4 S15312	85												
161085	ATU023 025	ATL8S2 9147:1 96..1	gap2	ATCEA4 C26769 1	85												
161086	ATU023 026	ATL8C1 6367:3 835..3 691	gap2	ATCEA4 C8328_ 1	85												
161087	ATU023 027	ATL8C3 6185:1 010..6 07	gap2	ATCEA4 S26508	85												
161088	ATU023 028	ATL8C3 1450:5 88..94 6	gap2	ATCEA4 S3610	85												
161089	ATU023 029	ATL8C1 8215:2 11..65 2	gap2	ATCEA4 C66239 _1	85												
161090	ATU023 030	ATL8C4 3531:6 60..10 47	gap2	ATCEA4 S2794	85												
161091	ATU023 031	ATL8C3 1912:4 91..90 2	gap2	ATCEA4 S11306	85												
161092	ATU023 032	ATL8S1 5850:1 05..20 6	gap2	ATCEA4 C1063_ 17	85												
161093	ATU023 033	ATL8C2 5650:1 ..85	gap2	ATCEA4 S2480	85												

161094	ATU023 034	ATL8C1 4073:1 205..8 15	gap2	ATCEA4 S11794	85														
161095	ATU023 035	ATL8C2 8506:1 60..43 2	gap2	ATCEA4 S26268	85														
161096	ATU023 036	ATL8S1 6963:1 ..222	gap2	ATCEA4 S19304	85														
161097	ATU023 037	ATL8C2 285:28 23..31 64	gap2	ATCEA4 S126	85														
161098	ATU023 038	ATL8C5 0113:1 20..42 3	gap2	ATCEA4 S26861	85														
161099	ATU023 039	ATL8C1 3004:1 ..98	gap2	ATCEA4 C19485 1	85														
161100	ATU023 040	ATL8C3 8028:7 85..12 75	gap2	ATCEA4 S3937	85														
161101	ATU023 041	ATL8C1 6742:1 003..3 17	gap2	ATCEA4 C2625- 1	85														
161102	ATU023 042	ATL8C1 3434:1 11..1	gap2	ATCEA4 S32144	85														
161103	ATU023 043	ATL8C4 175:15 30..19 79	gap2	ATCEA4 C6263- 1	85														
161104	ATU023 044	ATL8C4 1752:1 2344..	gap2	ATCEA4 S179	85														

[illegible]

161200	ATU023 140	ATL8C8 27:188 ..565	gap2	ATCEA4 S23410	85															
161201	ATU023 141	ATL8S2 6721:7 80..33	gap2	ATCEA4 S10699 , ATCEA4 C4355_1	85, 84															
161202	ATU023 142	ATL8C8 270:56 5..1	gap2	ATCEA4 C11699 4 1	85															
161203	ATU023 143	ATL8C3 3195:9 70..70	gap2	ATCEA4 C74068 1	85															
161204	ATU023 144	ATL8C4 0367:9 06..55 4	gap2	ATCEA4 S178	85															
161205	ATU023 145	ATL8S6 856:57 ..410	gap2	ATCEA4 S178	85															
161206	ATU023 146	ATL8C3 7260:1 201..1 085	gap2	ATCEA4 S29725	85															
161207	ATU023 147	ATL8C8 401:53 1..323	gap2	ATCEA4 C15803 1	85															
161208	ATU023 148	ATL8C2 9826:7 1..710	gap2	ATCEA4 C11949 7 1	85															
161209	ATU023 149	ATL8C1 8339:9 02..10 88	gap2	ATCEA4 S26182	85															
161210	ATU023 150	ATL8C2 1761:2 222..2 431	gap2	ATCEA4 S6023	85															

161260	ATU023 200	ATL8C1 4072:5 685..5 162	gap2	ATCEA4 S31926	84					g48352 31	99	541	9.5e- 41	yk375g 7.3 comes from this gene; cDNA EST yk375g 7.5 comes from this gene; cDNA EST yk435f 5.3 comes from this gene; ...
161261	ATU023 201	ATL8C2 9893:4 29..27 65	gap2	ATCEA4 S32017	84	ATL8C2 9893:4 29..27 65	0.63			g22447 52	97	1469	2.4e- 153	(Z9733 5) hypoth etical protei n [Arabi

161262	ATU023 202	ATL8C1 4501:4 492..1 2562	gap2	ATCEA4 S203	84					94	1616	2.5e- 140	(AF096 372) ns contain similarity to Arabid opsis thaliana retro transpo son Athila (GB:X8 1801) [Arabi dopsis thaliana]
161263	ATU023 203	ATL8C1 7341:1 641..1	gap2	ATCEA4 C32583 _1	84	ATL8C1 7341:1 477..1 55	0.72			89	1440	4.3e- 120	(AC004 136) putati ve cytoch rome P450 [Arabi dopsis thaliana]
161264	ATU023 204	ATL8C2 0295:1 762..1	gap2	ATCEA4 S81	84					88	2022	2.1e- 196	(AC006 918) putati ve Athila

161267	ATU023 207	ATL8C3 6648:1 530..2 63	gap2	ATCEA4 S31224 , ATCEA4 S4445	84, 82	ATL8C3 6648:1 463..2 63	0.54	g31281 87	83	2038	1.9e- 204	[Arabi dopsis thalia na]; (AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
161268	ATU023 208	ATL8C4 6720:2 521..1	gap2	ATCEA4 S4756	84	ATL8C4 6720:2 521..6 37	0.90	g43888 23	82	510	1.6e- 36	(AC004 521) putati ve beta- glucos idase [Arabi dopsis thalia na] (AC006 528) hypoeth etical

161269	ATU023 209	ATL8C3 7199:1 ..2090	gap2	ATCEA4 S3631	84	ATL8C3 7199:2 93..20 89	0.65	g35229 56	82	611			protein [Arabi dopsis thalia nal (AC004 411) putati ve pectin acetyl estera se precur sor [Arabi dopsis thalia nal (AF069 468) sterol -C5- desatu rase [Arabi dopsis thalia nal (AJ011 916) hypoth etical protein [Homo sapien s] (Z9970
161270	ATU023 210	ATL8C1 1657:1 062..1	gap2	ATCEA4 C267_1	84	ATL8C1 1657:1 046..3 8	0.65	g42347 68	80	921	4.0e- 84		
161271	ATU023 211	ATL8C5 918:10 40..1	gap2	ATCEA4 C21055 1, ATCEA4 C70917 _1	84, 82			g41280 29	79	214			
161272	ATU023	ATL8C1	gap2	ATCEA4	84	ATL8C1	0.62	g40068	75	1115	5.5e-		

	212	055:12 09..1		S30793		055:12 03..20 6		65			126	7) putati ve protei n [Arabi dopsis thalia na]
161273	ATU023 213	ATL8C4 2887:7 50..24 2	gap2	ATCEA4 S30003	84			g28092 60	73	217	9.0e- 19	(AC002 560) F21B7. 29 [Arabi dopsis thalia na]
161274	ATU023 214	ATL8C4 7046:9 84..1	gap2	ATCEA4 C1076_ 2	84	ATL8C4 7046:9 84..89	0.88	g24987 32	72	780	1.8e- 136	PROBAB LE NADP- DEPEND ENT OXIDOR EDUCTA SE P2 [Arabi dopsis thalia na]
161275	ATU023 215	ATL8C4 4850:1 55..13 05	gap2	ATCEA4 C4851_ 1, ATCEA4 S31042 , ATCEA4 S27859	84, 82, 82	ATL8C4 4850:1 58..97 6	0.87	g34510 68	71	664	1.7e- 43	(AL031 326) putati ve protei n [Arabi dopsis thalia na]
161276	ATU023	ATL8C4	gap2	ATCEA4	84	ATL8C4	0.48	g33778	71	2826	4.5e-	(AF076

161277	216	2966:6 75..55 66	S203			2966:6 75..55 66	16				267	275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
161278	218	2966:6 75..55 66	ATCEA4 S35428	gap2	ATL8C3 1379:1 ..768	ATL8C3 1379:8 6..768	0.51	g40637 49	70	212	1.7e- 08	(AC005 851) hypoth etical protei n [Arabi dopsis thalia na]
161279	219	2966:6 75..55 66	ATCEA4 S33179	gap2	ATL8C3 3700:4 368..1 09	ATL8C3 3700:4 277..1 09	0.49	g42630 62	69	450	6.0e- 38	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]

161279	ATU023 219	ATL8C1 8305:6 90..1	gap2	ATCEA4 C375_3	84	ATL8C1 8305:2 54..85	0.68	g23448 90	67	528	7.6e- 50	(AC002 388) TINY transc riptio n factor isolog [Arabi dopsis thalia na]
161280	ATU023 220	ATL8C4 886:11 90..1	gap2	ATCEA4 S11243	84			g13084 6	67	263	6.5e- 25	BASIC FORM OF PATHOG ENESIS - RELATE D PROTEI N 1 PRECUR SOR (PRP 1) [Nicot iana tabacu m]
161281	ATU023 221	ATL8C2 5720:1 ..3030	gap2	ATCEA4 S6271, ATCEA4 S2664	84, 82	ATL8C2 5720:1 41..30 05	0.70	g28530 78	66	2759	3.5e- 270	(AL021 768) TMV resist ance protei n N- like [Arabi dopsis

161282	ATU023 222	ATL8C3 2363:5 066..1 149	gap2	ATCEA4 S27391	84	ATL8C3 2363:5 003..1 149	0.50	g43887 32	66	395	2.5e- 17	thalia na] (AC006 413) putati ve Athila retroee lement ORF 2 protei n [Arabi dopsis thalia na]
161283	ATU023 223	ATL8C1 7681:1 ..1455	gap2	ATCEA4 C97274 _1	84	ATL8C1 7681:3 26..11 20	0.85	g43357 37	65	341	1.6e- 28	(AC006 248) putati ve serine /threo nine kinase [Arabi dopsis thalia na]
161284	ATU023 224	ATL8C1 391:27 33..64 4	gap2	ATCEA4 S178	84	ATL8C1 391:27 33..15 38	0.82	g47739 10	65	440	6.1e- 24	(AFL47 259) No defini tion line found [Arabi dopsis thalia na]
161285	ATU023	ATL8C4	gap2	ATCEA4	84	ATL8C4	0.58	g42630	65, 51	422,	4.1e-	(AC005

161286	225	9866:3 828..1		S33179		9866:3 754..4 28		62, g44328 07		3972	41, 0.0	142) hypoth etical protei n [Arabi dopsis thalia na]; (AC006 570) putati ve polypr otein [Arabi dopsis thalia na]
	ATU023 226	ATL8C4 0951:5 50..1	gap2	ATCEA4 S14586	84			g47411 86	64	79	1.2e- 07	(AL049 746) putati ve protei n [Arabi dopsis thalia na]
161287	ATU023 227	ATL8C2 3354:4 115..2 173	gap2	ATCEA4 C11926 3_1	84	ATL8C2 3354:3 494..2 173		g38602 62	62	961	1.8e- 98	(AC005 824) unknow n protei n [Arabi dopsis thalia na]
161288	ATU023	ATL8C3	gap2	ATCEA4	84			g47739	62	318	2.8e-	(AF147

161291	ATU023 231	ATL8C4 0247:1 ..620	gap2	ATCEA4 S12878	84	ATL8C4 0247:9 3..620	0.42	g45672 93	61	897	3.4e- 83	na] (AC006 918) putati ve Athila retroeo lement ORF1 protei n [Arabi dopsis thalia na]
161292	ATU023 232	ATL8C8 106:17 35..79 7	gap2	ATCEA4 S33179	84			g42630 62	60	409	3.0e- 42	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
161293	ATU023 233	ATL8C4 5622:1 ..888	gap2	ATCEA4 C52106 _1	84	ATL8C4 5622:1 34..88 6	0.81	g28326 72	58	275	2.9e- 24	(AL021 712) nifU- like protei n [Arabi dopsis thalia na]
161294	ATU023 234	ATL8C3 3209:1 ..1101	gap2	ATCEA4 C28885 _2	84	ATL8C3 3209:1 84..87 6	0.88	g28299 27	57	551	1.6e- 28	(AC002 291) Unknow n protei

161295	ATU023 235	ATL8C4 0891:8 23..15 77	gap2	ATCEA4 S747	84		ATL8C4 0891:8 32..15 58	0.68		945811 42	56	283	7.2e- 31	n [Arabi dopsis thalia na]
161296	ATU023 236	ATL8C3 5282:5 441..8 521	gap2	ATCEA4 S13901	84		ATL8C3 5282:5 441..8 521	0.48		947340 13	56	1813	5.9e- 174	(AC006 919) unknow n protei n [Arabi dopsis thalia na]
161297	ATU023 237	ATL8S1 3032:5 50..1	gap2	ATCEA4 C17863 _1	84					943143 76	54	236	1.5e- 25	(AC006 232) simila r to PIG-L [Arabi dopsis thalia na]
161298	ATU023 238	ATL8C4 8665:2 737..1	gap2	ATCEA4 S4422	84		ATL8C4 8665:2 705..3	0.47		930636 91	53	610	7.5e- 63	(AL022 537) putati

161302	ATU023 242	ATL8C3 0898:5 62..15 73	gap2	ATCEA4 S15209	84					g48503 95	51	434	1.1e- 36	(AC007 357) EST gb N37 870 comes from this gene. [Arabi dopsis thalia na]
161303	ATU023 243	ATL8S2 1577:3 82..1	gap2	ATCEA4 C9126_ 1	84	ATL8S2 1577:8 8..238	0.73			g13635 26	50	306	2.0e- 24	plasto quinol -- -- plasto cyanin reduct ase (EC 1.10.9 9.1) cytoch rome b6 - maize chloro plast [Zea mays]
161304	ATU023	ATL8C1	gap2	ATCEA4	84	ATL8C1	0.72			g30565	50	806	5.0e-	(AC004

	244	2778:2 590...6 49		S33396		2778:2 540...6 90		92			75	255) T1F9.1 3 [Arabi dopsis thalia na]
161305	ATU023 245	ATL8C2 1905:6 458...4 560	gap2	ATCEA4 S15577 , ATCEA4 S12925	84, 83			g45444 33	50	75	0.9994	(AC006 955) hypoth etical protei n [Arabi dopsis thalia na]
161306	ATU023 246	ATL8C3 0980:3 11...14 60	gap2	ATCEA4 S1006	84	ATL8C3 0980:4 08...60 2, ATL8C3 0980:1 253...1 074	0.90, 0.91	g42630 63	49	1502	2.8e- 126	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
161307	ATU023 247	ATL8C3 784:14 68...1	gap2	ATCEA4 C638_1	84	ATL8C3 784:14 23...10 5	0.80	g28298 80	49	1255	2.5e- 131	(AC002 396) glucos e-6- phosph ate 1- dehydr ogenas e [Arabi dopsis thalia na]

161308	ATU023 248	ATL8C4 3266:1 ..1116	gap2	ATCEA4 C52221 _1	84	ATL8C4 3266:2 28..87 8	0.96	g35598 05	48	637	6.4e- 53	(AJ006 787) putati ve phytoc helati n synthe tase [Arabi dopsis thalia na]
161309	ATU023 249	ATL8C4 2407:1 205..4 288	gap2	ATCEA4 S126	84	ATL8C4 2407:1 592..4 285	0.64	g41153 61, g42638 31	48, 31	206, 1351	1.6e- 17, 7.1e- 122	(AC005 957) hypoth etical protei n [Arabi dopsis thalia na]; (AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia na]
161310	ATU023 250	ATL8S1 2778:1 ..584	gap2	ATCEA4 C11750 _1	84			g44690 03	48	141	0.0007 1	(AL035 602) putati ve

161311	ATU023 251	ATL8C9 726:77 9..1	gap2	ATCEA4 S29531	84						g29110 49	48	1005	1.4e- 90	(AL021 961) glucos yltran sferas e - like protei n [Arabi dopsis thalia na]
161312	ATU023 252	ATL8C6 390:1. .1166	gap2	ATCEA4 C84570 _1	84					ATL8C6 390:14 0..885	g22890 11	47	1770	9.7e- 176	(AC002 335) MYB transc riptio n factor isolog [Arabi dopsis thalia na]
161313	ATU023 253	ATL8C1 0772:1 ..1183	gap2	ATCEA4 C3437_1, ATCEA4 C3437_5	84, 84					ATL8C1 0772:1 139..2 96	g23697 14	47	1746	6.0e- 180	(Z9717 8) elonga tion factor 2 [Beta vulgar is]

161314	ATU023 254	ATL8C3 816:1. .1462	gap2	ATCEA4 S8481	84	ATL8C3 816:47 6..136 9	0.90	g41153 81	45	872	3.3e- 59	(AC005 967) putati ve limone ne cyclas e [Arabi dopsis thalia na]
161315	ATU023 255	ATL8C8 118:71 6..1	gap2	ATCEA4 S4551, ATCEA4 C18918 _1	84, 82			g31842 81	45	739	2.8e- 68	(AC004 136) putati ve cytoch rome P450 [Arabi dopsis thalia na]
161316	ATU023 256	ATL8C3 7738:2 37..16 73	gap2	ATCEA4 S8484	84	ATL8C3 7738:2 37..14 22	0.74	g47259 43	44	266	1.3e- 26	(AL049 730) putati ve adenin e phosph oribos yltran sferas e [Arabi dopsis thalia na]
161317	ATU023 257	ATL8S1 8216:1	gap2	ATCEA4 S34635	84, 84	ATL8S1 8216:1	0.55	g44552 03	44	462	5.1e- 44	(AL035 440)

161318	ATU023 258	..582	gap2	ATCEA4 C54462 _2	84	ATL8C3 3914:2 68..94 6	0.58	g24628 22	42	199		putative protein [Arabidopsis thaliana]
161319	ATU023 259	ATL8C1 7511:1 ..556	gap2	ATCEA4 S23201	84	ATL8C1 7511:1 03..42 9	0.97	g27390 46	41	234	2.0e- 21	(AF024 652) polyphospho- sitol binding protein Ssh2p [Glycine max]
161320	ATU023 260	ATL8C9 693:79 2..1	gap2	ATCEA4 S32038	84	ATL8C9 693:75 0..259	0.89	g26424 50	41	605	5.3e- 61	(AC002 391) putative metal ion transport protein

161321	ATU023 261	ATL8C4 6853:1 ..1423	gap2	ATCEA4 C44776 _1	84	ATL8C4 6853:3 93..14 21	0.66	g28424 77	41	847	2.5e- 75	(Nramp) [Arabi dopsis thalia na]
161322	ATU023 262	ATL8C3 9913:8 31..28 9	gap2	ATCEA4 C11633 5_1	84	ATL8C3 9913:7 83..29 6	0.65	g39280 93	41	317	5.8e- 32	(AC005 770) IVR- like protei n [Arabi dopsis thalia na]
161323	ATU023 263	ATL8C3 8622:1 ..459	gap2	ATCEA4 C81453 _1	84	ATL8C3 8622:1 18..45 7	0.77	g30333 95	40	303	1.7e- 31	(AC004 238) putati ve zinc- finger protei n [Arabi dopsis thalia na]

161324	ATU023 264	ATL8C3 6385:1 ..1217	gap2	ATCEA4 C7142_2, ATCEA4 C7142_1	84, 83	ATL8C3 6385:3 17..11 44	0.77	g12097 56	39	505	2.7e- 18	(U4362 9) integr al membra ne protei n [Beta vulgar is]
161325	ATU023 265	ATL8C1 8905:2 013..1	gap2	ATCEA4 S4847	84	ATL8C1 8905:1 914..2 07	0.76	g34213 78	39	634	7.0e- 53	(AF080 249) kinesi n-like heavy chain [Arabi dopsis thalia na]
161326	ATU023 266	ATL8C3 9140:1 227..1	gap2	ATCEA4 S8768	84	ATL8C3 9140:6 05..92	0.72	g27958 06	39	551	5.1e- 39	(AC003 674) unknow n protei n [Arabi dopsis thalia na]
161327	ATU023 267	ATL8C1 9404:2 575..3 089	gap2	ATCEA4 S12521	84			g46782 17	39	389	3.1e- 37	(AC007 134) hypothe tical protei n [Arabi dopsis thalia

161328	ATU023 268	ATL8C1 7441:1 ..830	gap2	ATCEA4 C682_1	84	ATL8C1 7441:1 5..669	0.97	g37760 11	38	538	1.9e- 30	na] (AJ010 469) RNA helica se [Arabi dopsis thalia na]
161329	ATU023 269	ATL8C2 4234:3 104..1	gap2	ATCEA4 S30983	84			g45860 28	37	1471	3.1e- 196	(AC007 109) putati ve retrot ranspo son associ ated protei n [Arabi dopsis thalia na]
161330	ATU023 270	ATL8S2 849:53 2..1	gap2	ATCEA4 C703_1	84			g40494 01	37	174	3.0e- 09	(AJ131 580) glutat hione transf erase AtGST 10 [Arabi dopsis thalia na]
161331	ATU023 271	ATL8C2 278:15 86..93	gap2	ATCEA4 S36146	84			g41036 35	37	216	5.6e- 17	(AF026 538) ABA-

161332	ATU023 272	ATL8C4 0671:1 204..2 879	gap2	ATCEA4 S11628	84						g41153 61	37	230	1.2e- 22	(AC005 957) hypoth etical protei n [Arabi dopsis thalia na]	respon sive protei n [Horde um vulgar el]
161333	ATU023 273	ATL8C1 4539:5 306..4 570	gap2	ATCEA4 S12209	84						g45444 55	36	146	3.5e- 05	(AC006 592) hypoth etical protei n [Arabi dopsis thalia na]	
161334	ATU023 274	ATL8C3 9146:1 ..783	gap2	ATCEA4 S8759	84	ATL8C3 9146:4 36..72 5	0.88	g17909 22	35	391	6.0e- 28	(U7667 0) AtDMC1 [Arabi dopsis thalia na]				
161335	ATU023 275	ATL8C7 341:1. .1153	gap2	ATCEA4 S34116	84	ATL8C7 341:39 2..577	0.81	g31525 89	35	1016	1.8e- 104	(AC002 986) Strong simila rity				

161336	ATU023 276	ATL8C4 3437:5 591..3 632	gap2	ATCEA4 S11628 , ATCEA4 S11817	84, 82	ATL8C4 3437:5 591..3 632	0.81	g46999 43	35	134		to lupeol syntha se gb U49 919 from A. thalia na (secon d gene in a series of three with simila r homolo gies). [Arabi dopsis thalia na]
161337	ATU023 277	ATL8C4 0774:2 04..71 0	gap2	ATCEA4 C4500_1	84			g36081 37	35	388	5.6e- 31	(AC007 166) hypoth etical protei n [Arabi dopsis thalia na] (AC005 314) unknow n protei

161338	ATU023 278	ATL8C1 577:1. .1395	gap2	ATCEA4 C15001 _1	84		ATL8C1 577:13 5..116 9	0.44	g48368 96	34	1662	9.0e- 145	n [Arabi dopsis thalia nal] (AC007 369) Simila r to RNA helica ses [Arabi dopsis thalia nal]
161339	ATU023 279	ATL8C1 2598:6 16..13 03	gap2	ATCEA4 S5214	84				g27608 32	34	391	3.9e- 30	(AC003 105) simila r to barley ids-4 gene produc t [Arabi dopsis thalia nal]
161340	ATU023 280	ATL8C2 02:104 9..1	gap2	ATCEA4 C666_1	84		ATL8C2 02:103 2..110	0.92	g33343 49	33	812	2.4e- 86	GLYCYL -TRNA SYNTHE TASE (GLYCI NE-- TRNA LIGASE) (GLYRS)

161341	ATU023 281	ATL8C3 5927:1 368..2 34	gap2	ATCEA4 C32733 _1	84		ATL8C3 5927:1 228..2 34	0.68	g48368 07	33	59	0.44	[Arabi dopsis thalia na] (AF146 793) PFT27 [Mus muscul us]
161342	ATU023 282	ATL8C1 2475:1 016..1	gap2	ATCEA4 S17274	84		ATL8C1 2475:9 44..43 8	0.98	g27958 03	32	407	4.2e- 40	(AC003 674) putati ve beta- 1,3- endogl ucanas e [Arabi dopsis thalia na]
161343	ATU023 283	ATL8S2 0815:1 ..472	gap2	ATCEA4 C19145 _1	84		ATL8S2 0815:2 07..39 4	0.95	g28646 02	32	272	7.9e- 25	(Y1207 1) thylak oid lumen rotama se [Spina cia olerac ea]
161344	ATU023 284	ATL8S3 0793:4 81..1	gap2	ATCEA4 S4071, ATCEA4 C29546 _2	84, 84		ATL8S3 0793:3 96..22 4	0.72	g37696 73	32	117	1.2e- 08	(AF095 285) Tic20 [Pisum sativu m]

161345	ATU023 285	ATL8C1 7123:2 73..32 30	gap2	ATCEA4 S11628 , ATCEA4 S203	84, 83	ATL8C1 7123:2 73..30 91	0.71	942635 45	32	618	4.6e- 28	(AC006 250) putati ve Athila retro element ORF1 protei n [Arabi dopsis thalia na]
161346	ATU023 286	ATL8C1 0389:6 34..1	gap2	ATCEA4 C8099_1	84			925296 78	32	592		(AC002 535) unknow n protei n [Arabi dopsis thalia na]
161347	ATU023 287	ATL8C3 2823:6 86..1	gap2	ATCEA4 C27600_1	84			946783 10	31	769	1.6e- 67	(AL049 655) putati ve protei n [Arabi dopsis thalia na]
161348	ATU023 288	ATL8C2 6582:1 ..2368	gap2	ATCEA4 S17068	84			932528 11	31	187	2.6e- 10	(AC004 705) hypoth etical protei n

161349	ATU023 289	ATL8C1 0975:1 450..1	gap2	ATCEA4 S14438	84	ATL8C1 0975:9 18..57 6	0.99	923427 24	30	297	1.0e- 25	[Arabi dopsis thalia na] (AC002 341) unknow n protei n [Arabi dopsis thalia na]
161350	ATU023 290	ATL8C3 2039:7 22..1	gap2	ATCEA4 S15092 , ATCEA4 C1940_ 1	84, 83			936390 89	30	1104	4.0e- 89	(AF090 445) phosph olipas e D1 [Brass ica olerac ea var. capita ta]
161351	ATU023 291	ATL8C1 9208:6 3..201 2	gap2	ATCEA4 S1716	84	ATL8C1 9208:6 3..201 2	0.99					
161352	ATU023 292	ATL8S1 5933:2 ..432	gap2	ATCEA4 S22422	84	ATL8S1 5933:1 12..18 3	0.98					
161353	ATU023 293	ATL8C6 990:11 46..82 7	gap2	ATCEA4 S1007	84	ATL8C6 990:10 30..82 7	0.97					
161354	ATU023 294	ATL8C8 923:48	gap2	ATCEA4 C18993	84	ATL8C8 923:48	0.97					

	322	084:54 4..1		S20826		084:54 4..71												
161383	ATU023 323	ATL8C1 9561:1 00..85 1	gap2	ATCEA4 C5138 1	84	ATL8C1 9561:8 51..10 0	0.84											
161384	ATU023 324	ATL8C2 7518:1 433..6 0	gap2	ATCEA4 C1184 2, ATCEA4 S16867	84, 83	ATL8C2 7518:1 307..3 77	0.84											
161385	ATU023 325	ATL8S1 8399:1 57..59 3	gap2	ATCEA4 C95106 1	84	ATL8S1 8399:1 57..50 9	0.84											
161386	ATU023 326	ATL8C1 8264:4 47..10 50	gap2	ATCEA4 S321	84	ATL8C1 8264:4 47..63 7	0.83											
161387	ATU023 327	ATL8C9 758:54 8..137	gap2	ATCEA4 S34139	84	ATL8C9 758:49 9..137	0.83											
161388	ATU023 328	ATL8S4 069:31 5..628	gap2	ATCEA4 C491_1	84	ATL8S4 069:35 8..555	0.83											
161389	ATU023 329	ATL8C3 8388:1 ..835	gap2	ATCEA4 C30165 1	84	ATL8C3 8388:1 41..59 1	0.82											
161390	ATU023 330	ATL8C1 6049:7 54..18	gap2	ATCEA4 C19491 1	84	ATL8C1 6049:7 53..18	0.82											
161391	ATU023 331	ATL8C4 7650:2 89..1	gap2	ATCEA4 C289_1	84	ATL8C4 7650:1 50..33	0.81											
161392	ATU023 332	ATL8C4 4286:1 ..364	gap2	ATCEA4 S35768 , ATCEA4 S30716	84, 83	ATL8C4 4286:9 8..208	0.81											

161393	ATU023 333	ATL8C1 7253:8 45..60 3	gap2	ATCEA4 C70084 _3	84	ATL8C1 7253:6 90..60 3	0.80	g45443 74	100	1623	2.3e- 162	(AC006 920) unknow n protei n [Arabi dopsis thalia na]
161394	ATU023 334	ATL8C5 222:25 24..94 6	gap2	ATCEA4 S6851	83	ATL8C5 222:25 24..94 6	0.80					
161395	ATU023 335	ATL8C3 2794:1 092..2 5	gap2	ATCEA4 C35048 _1	84	ATL8C3 2794:1 092..2 5	0.79					
161396	ATU023 336	ATL8C2 4726:1 158..2 11	gap2	ATCEA4 S6519	84	ATL8C2 4726:7 58..21 1	0.78					
161397	ATU023 337	ATL8C3 0698:1 24..10 35	gap2	ATCEA4 S6199	84	ATL8C3 0698:1 58..10 35	0.78					
161398	ATU023 338	ATL8S8 955:13 9..513	gap2	ATCEA4 C22779 _1	84	ATL8S8 955:14 7..513	0.78					
161399	ATU023 339	ATL8C2 9580:3 367..4 5	gap2	ATCEA4 C19491 _1	84	ATL8C2 9580:3 367..4 5	0.77					
161400	ATU023 340	ATL8C4 2411:1 877..7 66	gap2	ATCEA4 S2780	84	ATL8C4 2411:1 823..7 66	0.77					
161401	ATU023 341	ATL8C2 6002:4 94..1	gap2	ATCEA4 S34316	84	ATL8C2 6002:4 20..34	0.77					

	351	5007:5 01..23 87	S17325		5007:5 01..18 77							
161412	ATU023 352	ATL8C2 3667:9 16..25	ATCEA4 S7753	84	ATL8C2 3667:9 14..25	0.71						
161413	ATU023 353	ATL8C2 5836:1 0..418 1	ATCEA4 S13901	83	ATL8C2 5836:1 0..400 0	0.70	g40380 66	100	743	1.7e- 64	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]	
161414	ATU023 354	ATL8C1 8556:7 57..32 47	ATCEA4 C36433 1, ATCEA4 C8042- 1, ATCEA4 S3834	83, 82, 82	ATL8C1 8556:7 71..32 47	0.69	g29824 37	100	2469	8.0e- 250	(AL022 224) terpen e cyclas e like protei n [Arabi dopsis thalia na]	
161415	ATU023 355	ATL8S1 1644:3 2..527	ATCEA4 C74725 1	84	ATL8S1 1644:1 73..48 8	0.69						
161416	ATU023 356	ATL8S2 8673:1 21..20 5	ATCEA4 C69904 1	84	ATL8S2 8673:1 89..12 5	0.68						
161417	ATU023 357	ATL8C3 2926:8 72..11 2	ATCEA4 C19922 1	84	ATL8C3 2926:8 72..48 7	0.68						

161418	ATU023 358	ATL8C3 3378:6 22..22 0	gap2	ATCEA4 C40222 _1	84	ATL8C3 3378:3 14..22 0	0.68					
161419	ATU023 359	ATL8C7 069:1. .611	gap2	ATCEA4 C11837 2 1	84	ATL8C7 069:48 ..584	0.66					
161420	ATU023 360	ATL8C3 7142:1 ..421	gap2	ATCEA4 S31274	84	ATL8C3 7142:1 16..42 1	0.66					
161421	ATU023 361	ATL8C3 0802:5 15..68 4	gap2	ATCEA4 S9887	84	ATL8C3 0802:5 15..66 5	0.66					
161422	ATU023 362	ATL8C1 7563:2 3..167 6	gap2	ATCEA4 S26674	84	ATL8C1 7563:2 3..149 3	0.65					
161423	ATU023 363	ATL8C7 044:10 22..24 9	gap2	ATCEA4 S1780	84	ATL8C7 044:88 9..249	0.64					
161424	ATU023 364	ATL8C2 233:33 9..1	gap2	ATCEA4 S33737	84	ATL8C2 233:32 5..206	0.64					
161425	ATU023 365	ATL8C4 5051:3 78..87 1	gap2	ATCEA4 S24511	84	ATL8C4 5051:3 78..78 8	0.64					
161426	ATU023 366	ATL8C4 4590:1 434..2 05	gap2	ATCEA4 S27142	84	ATL8C4 4590:1 434..2 25	0.63					
161427	ATU023 367	ATL8C2 1279:2 936..2 106	gap2	ATCEA4 S26640	84	ATL8C2 1279:2 936..2 333	0.62					
161428	ATU023 368	ATL8C2 1949:6	gap2	ATCEA4 S16748	83	ATL8C2 1949:1	0.61	g38772 51	100	80	0.0056	(Z9338 2)

	380	4569:5		S27178		4569:8							
161441	ATU023 381	ATL8C9 087:10 19..21 9	gap2	ATCEA4 C2858_1	84	ATL8C9 087:10 19..32 9	0.52						
161442	ATU023 382	ATL8C4 0739:8 18..37 5	gap2	ATCEA4 S11817 , ATCEA4 S11628	84, 84	ATL8C4 0739:5 36..37 5	0.52						
161443	ATU023 383	ATL8C3 343:31 3..132 9	gap2	ATCEA4 C2104_1	83	ATL8C3 343:34 1..128 7	0.52	924354 06	100	1056	1.5e- 102	(U8349 0) thau- ma- like protei n [Arabi dopsis thalia na]	
161444	ATU023 384	ATL8C7 585:19 0..677	gap2	ATCEA4 S11817 , ATCEA4 S11628	84, 83	ATL8C7 585:19 0..677	0.51						
161445	ATU023 385	ATL8C1 5530:6 02..14 22	gap2	ATCEA4 S29972	84	ATL8C1 5530:1 422..6 02	0.51						
161446	ATU023 386	ATL8C2 0799:4 028..3 174	gap2	ATCEA4 C69693 _1	84	ATL8C2 0799:4 028..3 174	0.49						
161447	ATU023 387	ATL8C4 9443:2 40..90 6	gap2	ATCEA4 C2750_1	84	ATL8C4 9443:2 40..86 8	0.48						
161448	ATU023	ATL8C3	gap2	ATCEA4	84	ATL8C3	0.47						

161453	ATU023 393	ATL8C4 3913:6 269..5 998	gap2	ATCEA4 S4856	84	ATL8C4 3913:6 226..6 047	0.46					
161454	ATU023 394	ATL8C3 707:44 3..135 4	gap2	ATCEA4 C12660 2_1	84	ATL8C3 707:44 3..900	0.45					
161455	ATU023 395	ATL8C4 9915:1 6391.. 38	gap2	ATCEA4 S33179	84	ATL8C4 9915:1 6391.. 38	0.45					
161456	ATU023 396	ATL8C1 283:39 18..12 123	gap2	ATCEA4 S30567	83	ATL8C1 283:90 97..12 123	0.43	g36953 97, g44173 09, g33778 16	100, 44 53, 44	2020, 885, 912	1.5e- 140, 1.7e- 78, 3.8e- 83	(AF096 372) No defini tion line found [Arabi dopsis thalia na]; (AC006 446) putati ve pol ypr otei n with a revers e transc riptas e domain [Arabi dopsis thalia na];

161457	ATU023 397	ATL8C2 0912:1 1..842	gap2	ATCEA4 C11620 1_1	84	ATL8C2 0912:2 68..84 2	0.42					(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
161458	ATU023 398	ATL8C2 6667:5 43..23 91	gap2	ATCEA4 S22066	84	ATL8C2 6667:2 391..5 43	0.42					
161459	ATU023 399	ATL8C4 1623:1 452..1 070	gap2	ATCEA4 C11575 _2	84	ATL8C4 1623:1 452..1 070	0.41					
161460	ATU023 400	ATL8S2 819:1. .456	gap2	ATCEA4 C4635_4, ATCEA4 C4635_5	84, 84	ATL8S2 819:21 2..452	0.41					
161461	ATU023	ATL8C1	gap2	ATCEA4	84							

[illegible][illegible]

6187

[illegible]

[illegible]

161793	ATU023 733	ATL8C1 4881:8 69..24 2	gap2	ATCEA4 C29000 _1	83					g48369 35	99	530	2.2e- 52	thalia na] (AC006 085) Hypoth etical protei n [Arabi dopsis thalia na]
161794	ATU023 734	ATL8C4 5565:1 196..8 36	gap2	ATCEA4 S32475	83					g41855 05	99	408	1.8e- 41	(AF101 038) nonspe cific lipid- transf er protei n precu sor [Brass ica napus]
161795	ATU023 735	ATL8C4 8301:4 0..851	gap2	ATCEA4 C5187 _1	83					g34510 72	99	445	1.3e- 35	(AL031 326) putati ve protei n [Arabi dopsis thalia na]
161796	ATU023 736	ATL8C3 272:67 9..115	gap2	ATCEA4 S370	83					g46626 46	99	443	1.9e- 19	(AC006 429) hypoth etical

161797	ATU023 737	ATL8C2 0617:2 417..1	gap2	ATCEA4 S7755	83						g22448 26	99	3359	3.2e- 300	(Z9733 6) replic ation contro l protei n homolo g [Arabi dopsis thalia na]
161798	ATU023 738	ATL8C4 2570:6 31..10 78	gap2	ATCEA4 S9621	83						g30435 36	99	328	2.8e- 31	(AB000 708) SAUR [Rapha nus sativu s]
161799	ATU023 739	ATL8C1 4051:4 231..4 658	gap2	ATCEA4 S4192	83						g18711 79	99	429	9.0e- 30	(U9043 9) FMRFam ide precur sor isolog [Arabi dopsis thalia na]
161800	ATU023 740	ATL8C2 6074:1	gap2	ATCEA4 S31356	83						g18715 77	99	148	5.5e- 15	(Y1155 3)

161801	ATU023 741	ATL8C2 6521:7 533..3 435	gap2	ATCEA4 S34902	83	ATL8C2 6521:7 533..3 435	0.72	g31282 34	95	724	1.3e- 46	(AC004 077) hypoth etical protein [Arabi dopsis thalia na]
161802	ATU023 742	ATL8C1 268:68 78..36 5	gap2	ATCEA4 S12798	83	ATL8C1 268:21 10..64 0	0.98	g40068 53, g43097 65	93, 77	964, 4060	1.0e- 99, 0.0	(Z9970 7) cytoch rome P450- like protein [Arabi dopsis thalia na]; (AC006 217) putati ve retrot ranspo son

161803	ATU023 743	ATL8C1 68:1.. 1729	gap2	ATCEA4 S11082	83	ATL8C1 68:113 7..172 9	0.69	g36953 96	92	1562			polypr oteins [Arabi dopsis thalia na] (AF096 372) contai ns simila rity to . Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
161804	ATU023 744	ATL8C3 1387:1 3966.. 8831	gap2	ATCEA4 S81	83	ATL8C3 1387:1 3852.. 9350	0.42	g47739 20	91	2868	2.4e- 267		(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]
161805	ATU023 745	ATL8C1 6382:1	gap2	ATCEA4 S3158	83	ATL8C1 6382:1	0.98	g31352 52	90	768	8.3e- 61		(AC003 058)

161806	ATU023 746	gap2	ATCEA4 C874_1	83	ATL8C4 3261:7 226..1 987	41..14 85	0.77	g22447 70	90	5753	0.0	(Z9733 5) unname d protei n produc t [Arabi dopsis thalia na]
161807	ATU023 747	gap2	ATCEA4 C11665 3_1	83	ATL8C3 4950:2 499..1 157	ATL8C3 4950:2 499..1 157	0.97	g22448 93	89	1489	4.6e- 156	(Z9733 8) simila rity to cytoch rome P450 [Arabi dopsis thalia na]
161808	ATU023 748	gap2	ATCEA4 S34379	83	ATL8C3 5680:1 ..3587	ATL8C3 5680:1 00..35 87	0.85	g40564 37	88	1074	9.5e- 79	(AC005 990) Strong simila rity to PFAM PF1000

161809	ATU023 749	ATL8C3 690:49 56..1	gap2	ATCEA4 S11406	83	ATL8C3 690:46 62..10 15	0.64	g42635 49, g43887 22	87, 85	2035, 1748	2.7e- 207, 7.2e- 142	69 Eukary otic protei n kinase domain . [Arabi dopsis thalia na]
161810	ATU023	ATL8C4	gap2	ATCEA4	83	ATL8C4	0.84	g39351	83	851	2.2e-	(AC006 250) putati ve En/Spm transp oson hypoth etical protei n 1 [Arabi dopsis thalia na]; (AC006 413) putati ve centro meric protei n [Arabi dopsis thalia na]
												(AC005)

750	2552:1 632..2 30	C41655 _1		2552:1 306..2 30		51		88	106) T25N20 .15 [Arabi dopsis thalia na]
161811	ATU023 751	gap2	ATL8C4 5721:1 ..1919	ATL8C4 5721:4 8..116 6	83	g33675 35	1914	4.8e- 198	(AC004 392) F8K4.2 2 [Arabi dopsis thalia na]
161812	ATU023 752	gap2	ATL8C1 1079:9 28..29	ATL8C1 1079:8 32..13 4	83	g28282 89	854	5.2e- 79	(AL021 687) hypoth etical protei n [Arabi dopsis thalia na]
161813	ATU023 753	gap2	ATL8C1 031:19 58..57 7	ATL8C1 031:19 58..57 7	83, 82	g81884 9	1226	4.0e- 131	(U2543 0) nucleo tide pyroph osphat ase precu sor [Oryza sativa]
161814	ATU023 754	gap2	ATL8C2 0449:1 360..2	ATL8C2 0449:7 94..27	83	g36953 84	255	7.3e- 08	(AF096 370) contai

161815	ATU023 755	ATL8C2 9699:1 046..2 48	gap2	ATCEA4 C12600 1, ATCEA4 S31270	83, 82	ATL8C2 9699:9 40..24 8	0.93	g46782 26	80	429	1.4e- 33	(AC007 135) putati ve 40S riboso mal protei n S14 [Arabi dopsis thalia na]
161816	ATU023 756	ATL8C1 9765:1 431..3 35	gap2	ATCEA4 C53113 1 _	83			g38920 54	80	1300	6.3e- 135	(AC002 330) putati ve glycos yltran

161817	ATU023 757	ATL8C3 663:98 3..239 9	gap2	ATCEA4 S15077	83	ATL8C3 663:98 3..230 1	0.81	g95142 7	79	1209	7.4e- 128	sferas e [Arabi dopsis thalia na] (M5985 7) stearo yl- acyl- carrie r protei n desatu rase [Ricin us commun is]
161818	ATU023 758	ATL8S3 0460:1 ..234	gap2	ATCEA4 C30036 _1	83			g44551 02	78	128	0.072	(AF124 226) pollen _ - specif ic protei n BAN102 [Brass ica rapa]
161819	ATU023 759	ATL8C4 1788:9 567..1 2522	gap2	ATCEA4 S81	83			g45672 96	77	1599	2.4e- 163	(AC006 918) putati ve Athila retro element

161820	ATU023 760	ATL8C4 923:11 2..492	gap2	ATCEA4 C4181_1	83						g37383 18	77	255	1.2e- 27	(AC005 170) unknown protein [Arabi dopsis thalia na]
161821	ATU023 761	ATL8C4 1982:5 283..6 240	gap2	ATCEA4 S1695	83						g33353 32	76	1033	3.3e- 92	(AC004 512) Contains similarity to S- receptor or kinase gb D88 193 from Brassica rapa. [Arabi dopsis thalia na]
161822	ATU023 762	ATL8C3 3498:2 838..1	gap2	ATCEA4 S2804	83	ATL8C3 3498:2 838..6	0.87	g37575 16	71	2924	4.1e- 308	(AC005 167) putative			

161826	ATU023 766	ATL8C9 393:60 6..131 0	gap2	ATCEA4 S388	83	ATL8C9 393:63 7..120 1	0.45	g45389 69	70	442	1.2e- 46	na] (Al049 488) putati ve protei n [Arabi dopsis thalia na]
161827	ATU023 767	ATL8C5 749:17 81..1	gap2	ATCEA4 C11420 8_1	83	ATL8C5 749:17 81..24 0	0.45	g32490 76	69	1229		(AC004 473) Simila r to beta glucos idase (bg1A) gb X94 986 from Maniho t escule nta. [Arabi dopsis thalia na]
161828	ATU023 768	ATL8C3 5792:2 51..41 67	gap2	ATCEA4 C2115_1	83	ATL8C3 5792:3 77..39 86	0.79	g21911 74	68	2153	4.8e- 175	(AF007 270) simila r to the peptid ase family S16 [Arabi

161829	ATU023 769	ATL8C9 442:1. .4282	gap2	ATCEA4 S11628	83	ATL8C9 442:69 8..428 2	0.70	g33778 16	68	2340	1.7e- 222	dopsis thalia na] (AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
161830	ATU023 770	ATL8C9 69:1.. 1238	gap2	ATCEA4 C74355 _1	83	ATL8C9 69:137 ..1238	0.95	g34510 75	67	1556	1.2e- 155	(AL031 326) putati ve protei n [Arabi dopsis thalia na]
161831	ATU023 771	ATL8C3 2830:1 ..961	gap2	ATCEA4 C7997 _1	83			g39285 43	67	1268	3.6e- 125	(AB016 819) 、 UDP- glucos e glucos

161832	ATU023 772	ATL8C4 6344:1 471..1	gap2	ATCEA4 S4078	83		ATL8C4 6344:3 96..25 0	0.49	g45859 11	66	1578	8.5e- 150	yltran sferas e [Arabi dopsis thalia na]
161833	ATU023 773	ATL8C3 0665:3 06..15 26	gap2	ATCEA4 C24446 _1	83		ATL8C3 0665:5 06..14 21	0.48	g46462 28	65	142	3.9e- 10	(AC007 235) putati ve MuDR MURA transp osase [Arabi dopsis thalia na]
161834	ATU023 774	ATL8C3 9317:8 32..21 3	gap2	ATCEA4 S178	83				g40380 66	65	439	7.9e- 14	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
161835	ATU023	ATL8C9	gap2	ATCEA4	83		ATL8C9	0.86	g39803	64	422	9.0e-	(AC004

161836	775	370:45 0..182 3		S5282		370:45 0..181 1	97				47	561) putati ve protei n phosph atase 2C [Arabi dopsis thalia nal]
	ATU023 776	ATL8C3 162:11 ..2635	gap2	ATCEA4 S11628 , ATCEA4 S11817	83, 82	ATL8C3 162:11 ..2635	0.62	g33778 16	64	1248	1.6e- 114	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia nal]
161837	ATU023 777	ATL8C9 009:39 67..60	gap2	ATCEA4 S33179	83	ATL8C9 009:39 67..60	0.47	g42630 62	63	354		(AC005 142) hypoth etical protei n [Arabi

161838	ATU023 778	ATL8C1 5596:1 ..447	gap2	ATCEA4 S31969	83						g44572 21	63	162	5.8e- 11	dopsis thalia nal (AF127 797) putati ve bZIP DNA- bindin g protei n [Capsi cum chinen se]
161839	ATU023 779	ATL8C2 2260:3 488..2 42	gap2	ATCEA4 C63088 _1	83	ATL8C2 2260:3 462..6 99	0.52	g44544 48, g21911 77	61, 54	623, 621	1.9e- 58, 3.7e- 61				(AC006 234) hypoth etical protei n [Arabi dopsis thalia nal; (AF007 270) belong s to the SPOU family of rRNA methyl ases. [Arabi dopsis

161840	ATU023 780	ATL8C1 6742:3 25..19 02	gap2	ATCEA4 S12719	83		ATL8C1 6742:3 25..18 14	0.67		g30565 80	60	2359	1.7e- 248	thalia na] (AC004 255) T1F9.1 [Arabi dopsis thalia na]
161841	ATU023 781	ATL8C9 500:12 42..22 39	gap2	ATCEA4 C29794 _10	83		ATL8C9 500:12 42..22 30	0.65		g45593 54	59	1744	8.4e- 05	(AC006 585) unknow n protei n [Arabi dopsis thalia na]
161842	ATU023 782	ATL8C1 7271:1 ..2239	gap2	ATCEA4 S35841	83		ATL8C1 7271:5 7..206 0	0.89		g48357 52	57	1434	6.0e- 126	(AC007 202) Is a member of the PF1000 69 Eukary otic protei n kinase family . ESTs gb T46 484, gb AF0 66875 and gb N96

161843	ATU023 783	ATL8C9 331:11 59..51	gap2	ATCEA4 S12243	83	ATL8C9 331:11 59..16 3	0.75	g32184 67	57	151	1.9e- 12	(AJ006 529) putati ve phosph atase [Gallu s gallus]	237 come from this gene. [Arabi dopsis thalia na]
161844	ATU023 784	ATL8C9 672:88 3..110	gap2	ATCEA4 S12320	83	ATL8C9 672:75 3..574	0.74	g40564 40	57	787	1.7e- 61	(AC005 990) Simila r to OBP32p ep protei n gb U37 698 from Arabid opsis thalia na. [Arabi dopsis thalia na]	(Z9733 9)
161845	ATU023 785	ATL8C3 7332:1	gap2	ATCEA4 S30891	83			g22449 49	57	545			

161846	ATU023 786	..1190	gap2	ATCEA4 C34015 _1	83		ATL8C3 0914:3 431..2 311	0.99	g25296 78	56	579	1.6e- 35	similarity to ORF - Lilium longif lorum [Arabi dopsis thalia na]
161847	ATU023 787		gap2	ATCEA4 C7895 _1	83		ATL8C2 0775:5 86..27 3	0.81	g30212 76	56	664	1.3e- 57	(AC002 535) unknown protein [Arabi dopsis thalia na]
161848	ATU023 788		gap2	ATCEA4 C29160 _1	83				g19463 74	56	75	0.0001 1	(AL022 347) serine /threo nine kinase - like protein [Arabi dopsis thalia na]
													(U9321 5) myb- like protein

161849	ATU023 789	ATL8C3 7684:9 22..1	gap2	ATCEA4 C78663 _1	83		ATL8C3 7684:8 03..65	0.68	g44553 57	55	469	3.7e- 42	isolog [Arabi dopsis thalia nal] (AL035 524) putati ve protei n [Arabi dopsis thalia nal]
161850	ATU023 790	ATL8C4 7516:1 390..1	gap2	ATCEA4 S6706	83		ATL8C4 7516:1 338..3 73	0.57	g22449 00	54	1194	2.9e- 109	(Z9733 8) simila rity to hypoth etical protei n HYP1 - Arabid opsis [Arabi dopsis thalia nal]
161851	ATU023 791	ATL8C1 9339:1 171..1	gap2	ATCEA4 C11841 8_1	83		ATL8C1 9339:6 12..31 0	0.71	g48039 38	53	973	4.1e- 97	(AC006 264) putati ve aromat ic amino acid permea

161852	ATU023 792	ATL8C1 0948:1 240..1	gap2	ATCEA4 S12719	83	ATL8C1 0948:1 181..8 1	0.50	g30565 87	53	1869	1.1e- 180	(AC004 255) T1F9.8 [Arabi dopsis thalia na]
161853	ATU023 793	ATL8C3 4010:1 620..6 84	gap2	ATCEA4 C475_1	83	ATL8C3 4010:1 484..7 99	0.90	g40068 70	51	821	8.2e- 89	(Z9970 7) patati n-like protei n [Arabi dopsis thalia na]
161854	ATU023 794	ATL8C3 0406:3 624..5 70	gap2	ATCEA4 C17251 _1, ATCEA4 C43153 _1	83, 82	ATL8C3 0406:3 451..5 70	0.95	g45079 43	50	739	1.6e- 47	export in l (CRM1, yeast, homolo g) [Homo sapien s]
161855	ATU023 795	ATL8C4 5075:1 452..1	gap2	ATCEA4 C32769 _1	83	ATL8C4 5075:1 243..1 22	0.87	g26739 14	50	939	4.7e- 92	(AC002 561) hypothe tical protei n [Arabi dopsis thalia na]

161856	ATU023 796	ATL8C1 1874:1 218..1	gap2	ATCEA4 C17246 1, ATCEA4 C3222_1	83, 83	ATL8C1 1874:4 60..31 5	0.83	g46783 86	49	194	1.3e- 19	na] (AL049 656) putati ve protei n [Arabi dopsis thalia na]
161857	ATU023 797	ATL8C3 1947:1 226..1	gap2	ATCEA4 C605_1	83	ATL8C3 1947:8 03..72	0.74	g30804 33	49	958	1.7e- 95	(AL022 605) putati ve gamma- glutam yltran sferas e [Arabi dopsis thalia na]
161858	ATU023 798	ATL8C4 8063:9 63..1	gap2	ATCEA4 C30985 1_	83	ATL8C4 8063:8 52..69	0.74	g35488 02	49	777	9.6e- 73	(AC005 313) axi 1- like protei n [Arabi dopsis thalia na]
161859	ATU023 799	ATL8C9 206:1. .927	gap2	ATCEA4 S30035	83	ATL8C9 206:20 8..792	0.58	g34510 70	49	104		(AL031 326) putati ve protei n

															[Arabi dopsis thalia na]
161860	ATU023 800	ATL8S1 2693:1 ..271	gap2	ATCEA4 C3967_1	83						g24936 96	49	303	3.4e- 26	HYPOTH ETICAL 21.5 KD PROTEI. N (ORF 185) [Brass ica olerac ea]
161861	ATU023 801	ATL8C2 4284:9 81..1	gap2	ATCEA4 S31256	83						g21297 35	49	1447	2.2e- 148	serine /threo nine- specif ic kinase (EC 2.7.1. -) precur sor - Arabid opsis thalia na
161862	ATU023 802	ATL8C4 9400:1 ..1678	gap2	ATCEA4 C1985_1	83	ATL8C4 9400:8 4..155 4	0.80	g31525 74	48	1494	3.2e- 119	(AC002 986) Strong simila rity to			

161863	ATU023 803	ATL8C6 671:25 66..36 21	gap2	ATCEA4 S5637	83	ATL8C6 671:29 14..35 77	0.73	g44067 89	48	1049	6.0e- 111	tha... [AC006 532) putati ve glutam ate decarb oxylas e [Arabi dopsis thalia na]
161864	ATU023 804	ATL8C4 2828:1 03..18 24	gap2	ATCEA4 S12319	83			g42621 75	48	185	2.1e- 15	(AC005 508) 12894 [Arabi dopsis thalia na]
161865	ATU023 805	ATL8S2 0882:4 92..1	gap2	ATCEA4 S31331	83	ATL8S2 0882:4 84..37 1	0.98	g30045 49	47	297	2.6e- 30	(AC003 673) unknown n protei n [Arabi dopsis thalia na]
161866	ATU023 806	ATL8C2 7926:8 00..54 9	gap2	ATCEA4 S30164	83	ATL8C2 7926:6 46..54 9	0.96	g26959 25	47	156		(AJ222 776) hypoth etical protei n [Horde um]

161867	ATU023 807	ATL8S1 5272:1 ..479	gap2	ATCEA4 C54574 _1	83	ATL8S1 5272:8 1..418	0.71	g12796 40	47	267	1.9e- 26	vulgar el (X9220 4) NAM [Petun ia x hybrid a]
161868	ATU023 808	ATL8C6 774:1. .1196	gap2	ATCEA4 S7943, ATCEA4 S6668	83, 83	ATL8C6 774:15 2..694	0.44	g45593 54	47	1109	2.9e- 05	(AC006 585) unknow n protei n [Arabi dopsis thalia na]
161869	ATU023 809	ATL8C2 1686:4 341..3 705	gap2	ATCEA4 S1483	83			g43357 61	47	230	7.5e- 20	(AC006 284) unknow n protei n [Arabi dopsis thalia na]
161870	ATU023 810	ATL8C3 83:116 2..1	gap2	ATCEA4 S17997	83			g41851 39	47	771	4.5e- 77	(AC005 724) putati ve diacyl glycer ol kinase [Arabi dopsis thalia na]

161871	ATU023 811	ATL8C2 7636:1 ..1033	gap2	ATCEA4 S5273, ATCEA4 C48910 _1	83, 83	ATL8C2 7636:8 8..679	0.85	g21911 84	46	712	(AF007 271) Simila r to sodium /hydro gen exchan ger; coded for by A. thalia na cDNA T75860 [Arabi dopsis thalia na]
161872	ATU023 812	ATL8C3 7157:1 681..3 06	gap2	ATCEA4 S12338	83	ATL8C3 7157:1 307..3 06	0.72	g45393 86	46	1939	(AL035 526) extens in- like protei n [Arabi dopsis thalia na]
161873	ATU023 813	ATL8C1 6007:2 234..1 452	gap2	ATCEA4 S15186	83			g45899 65	45	506	(AC007 169) putati ve glyoxa lase II [Arabi dopsis

161874	ATU023 814	ATL8S3 882:10 0..502	gap2	ATCEA4 S2815	83		ATL8S3 882:10 0..479	0.79		g39158 42	44	327	7.1e- 35	thalia nal RAS- RELATE D PROTEI N RAB11A [Arabi dopsis thalia nal].
161875	ATU023 815	ATL8C4 3597:1 185..1	gap2	ATCEA4 C34137 _1	83		ATL8C4 3597:1 185..7 0	0.74		g34618 48	44	1518		(AC005 315) putati ve ATPase [Arabi dopsis thalia nal]
161876	ATU023 816	ATL8C4 4108:1 ..1144	gap2	ATCEA4 S32614	83		ATL8C4 4108:2 57..11 44	0.68		g14193 90	44	700	1.0e- 44	(X9892 6) thylak oid- bound ascorb ate peroxi dase [Arabi dopsis thalia nal]
161877	ATU023 817	ATL8C3 5729:1 ..335	gap2	ATCEA4 C2655 _4	83					g22621 67	43	301	1.3e- 24	(AC002 329) cytoso lic riboso mal

161878	ATU023 818	ATL8C3 9207:1 ..916	gap2	ATCEA4 S32539	83						g41153 76	42	750	1.5e- 73	protein S4 [Arabi dopsis thalia na] (AC005 967) unknown protein [Arabi dopsis thalia na]
161879	ATU023 819	ATL8C4 2015:8 37..26 37	gap2	ATCEA4 S3937	83						g47739 10	42	328	8.8e- 32	(AF147 259) No definition line found [Arabi dopsis thalia na]
161880	ATU023 820	ATL8C4 6913:9 70..36 3	gap2	ATCEA4 S27853	83						g45858 72	42	545	9.5e- 55	(AC005 850) Hypoth etical protein [Arabi dopsis thalia na]
161881	ATU023 821	ATL8S2 0867:4 25..1	gap2	ATCEA4 C1870_ 1	83						g42067 89	41	373	6.1e- 30	(AF112 864) syntax

161882	ATU023 822	ATL8C1 7626:4 778..4 461	gap2	ATCEA4 S33845	83						g11278 5	41	148	2.3e- 10	DNA-3- METHYL ADENIN E GLYCOS IDASE I (3- METHYL ADENIN E-DNA GLYCOS YLASE I, CONSTITUTIVE) (TAG I) [Escherichia coli]
161883	ATU023 823	ATL8C1 3000:1 423..1	gap2	ATCEA4 S31467	83	ATL8C1 3000:1 073..3 10	0.86				g19316 41	39	1522	4.2e- 134	(U9597 3) unknown protein [Arabis dopsis thaliana]

161884	ATU023 824	ATL8C2 0624:4 226..5 75	gap2	ATCEA4 S10347	83	ATL8C2 0624:3 907..5 75	0.63	g32490 77	39	682	1.2e- 61	(AC004 473) Simila r to prunas in hydrol ase precu sor gb U50 201 from Prunus seroti na. ESTs gb T21 225 and gb AA5 86305 come from this gene. [Arabi dopsis thalia na]
161885	ATU023 825	ATL8C1 0274:8 12..1	gap2	ATCEA4 S30836	83	ATL8C1 0274:7 74..32 9	0.45	g22447 95	39	1109		(Z9733 6) hypo thetical protein [Arabi dopsis thalia na]

161886	ATU023 826	ATL8C4 9852:1 140..1	gap2	ATCEA4 C79637 _1	83				g45876 12	39	72	0.29	(AC006 951) unknown protein [Arabi dopsis thalia na]
161887	ATU023 827	ATL8C4 2581:9 94..1	gap2	ATCEA4 S20305	83	ATL8C4 2581:9 40..28 6	0.91		g22307 57	38	434	4.7e- 46	(Y1196 9) dnaJ- like protein [Arabi dopsis thalia na]
161888	ATU023 828	ATL8S1 6698:5 84..49	gap2	ATCEA4 S414, ATCEA4 S698	83, 83	ATL8S1 6698:4 85..49	0.89		g34349 73	37	194	1.5e- 17	(AB008 106) ethylene response element binding factor 4 [Arabi dopsis thalia na]
161889	ATU023 829	ATL8S2 7105:1 ..619	gap2	ATCEA4 S33453	83				g40565 05	37	69	0.0011	(AC005 896) noduli n-like

161890	ATU023 830	ATL8C1 5945:1 ..556	gap2	ATCEA4 S10686	83						g34618 17	37	162	1.3e- 18	protein [Arabi dopsis thalia na]
161891	ATU023 831	ATL8S7 047:24 6..1	gap2	ATCEA4 C17868 _1	83					ATL8S7 047:17 4..50	g11756 14	36	64	0.40	ISOAMY L ACETAT E- HYDROL YZING ESTERA SE [Sacch aromyc es cerevi siae]
161892	ATU023 832	ATL8C1 4775:5 157..7 0	gap2	ATCEA4 S33179	83					ATL8C1 4775:9 89..70	g44328 02	36	1274	1.5e- 136	(AC006 437) putati ve pol polypr oteins, 5' partia l [Arabi dopsis

161893	ATU023 833	ATL8C4 7165:1 ..1821	gap2	ATCEA4 C615_1 , ATCEA4 S7095	83, 83	ATL8C4 7165:1 218..1 446	0.72	g22307 57	36	508	4.5e- 43	thalia nal (Y1196 9) dnaJ- like protei n [Arabi dopsis thalia nal]
161894	ATU023 834	ATL8S2 0347:1 ..485	gap2	ATCEA4 C5173_1	83	ATL8S2 0347:1 30..29 6	0.60	g47551 89	36	631	3.8e- 53	(AC007 018) putati ve cytoch rome P450 [Arabi dopsis thalia nal]
161895	ATU023 835	ATL8S8 529:56 8..1	gap2	ATCEA4 C57357 _1	83	ATL8S8 529:34 5..93	0.50	g26606 73	36	446	3.7e- 38	(AC002 342) unknow n protei n [Arabi dopsis thalia nal]
161896	ATU023 836	ATL8S1 318:9. .513	gap2	ATCEA4 S11082	83			g36953 96	36	530	9.1e- 42	(AF096 372) contai ns simila rity to

161899	ATU023 839	ATL8S1 8831:1 ..480	gap2	ATCEA4 C14652 _1	83	ATL8S1 8831:1 02..33 9	0.69	g40068 72	35	166	7.5e- 17	(Z9970 7) methio nyl aminop eptida se- like, protei n [Arabi dopsis thalia na]
161900	ATU023	ATL8S1	gap2	ATCEA4	83			g11451	35	336	1.6e-	ATP

	840	0537:1 ..541		C37234 _1					8				26	SYNTHASE ALPHA CHAIN [Zea mays]
161901	ATU023 841	ATL8C4 3425:1 474..1	gap2	ATCEA4 C19408 _1	83				g11685 30	35	247			SERINE /THREO NINE- PROTEI N KINASE ASK2 [Arabi dopsis thalia na]
161902	ATU023 842	ATL8C9 176:1. .1296	gap2	ATCEA4 C43514 _1	83		ATL8C9 176:13 0..909	0.95	g48268 82	34	104			nuclea r matrix protei n p84 [Homo sapien s]
161903	ATU023 843	ATL8S1 83:567 ..1	gap2	ATCEA4 S13487	83		ATL8S1 83:476 ..7	0.76	g30333 81	34	540	2.7e- 57		(AC004 238) putati ve UDP- galact ose-4- epimer ase [Arabi dopsis thalia na]
161904	ATU023 844	ATL8C3 5098:1	gap2	ATCEA4 C28461	83		ATL8C3 5098:1	0.60	g47261 19	34	458	1.4e- 39		(AC006 436)

161905	ATU023 845	ATL8C9 503:58 0..212	gap2	ATCEA4 S3569	83		364..1 308					g44552 97	34	292	1.6e- 27	(AL035 528) hypoth etical protein [Arabi dopsis thalia na]
161906	ATU023 846	ATL8C2 0904:7 79..1	gap2	ATCEA4 S451	83							g27608 34	34	133	7.2e- 07	(AC003 105) putati ve nitrat e transp orter [Arabi dopsis thalia na]
161907	ATU023 847	ATL8C2 6719:1 ..809	gap2	ATCEA4 C81763 1	83							g29095 22	34	74	0.18	(AL021 932) ufaA1

161908	ATU023 848	ATL8S9 308:43 8..1	gap2	ATCEA4 C28040 _1	83						g36183 20	34	404	2.8e- 36	(AB001 888) zinc finger protein [Oryza sativa]
161909	ATU023 849	ATL8C1 6125:5 60..1	gap2	ATCEA4 S2524	83				ATL8C1 6125:4 65..15	0.89	g46782 16	33	117	1.0e- 08	(AC007 134) hypoth etical protein [Arabi dopsis thalia na]
161910	ATU023 850	ATL8C4 7101:1 ..580	gap2	ATCEA4 S13631	83				ATL8C4 7101:4 7..394	0.73	g22621 63	33	410	1.3e- 43	(AC002 329) hypoth etical protein simila r to F5J6.1 0 [Arabi dopsis thalia na]
161911	ATU023	ATL8C2	gap2	ATCEA4	83				ATL8C2	0.65	g34829	33	662	2.2e-	(AC003

851	547:70 9..1		S35693		547:28 5..205	19	58	970) Putati ve protei n kinase [Arabi dopsis thalia nal]
161912	ATU023 852	gap2	ATCEA4 C7417_1	83	ATL8C1 7068:2 022..54	0.40	205	(AC005 727) putati ve dUDP- glucos e 4-6- dehydr atase [Arabi dopsis thalia nal]
161913	ATU023 853	gap2	ATCEA4 S35645	83	ATL8C8 208:21 53..1610	0.99	307	(AL022 223) putati ve protei n [Arabi dopsis thalia nal]
161914	ATU023 854	gap2	ATCEA4 S31819	83			291	(AF129 516) fertil izatio n- indepe ndent

161915	ATU023 855	ATL8C2 5303:8 09..1	gap2	ATCEA4 C1984_1, ATCEA4 S863	83, 82	ATL8C2 5303:5 92..21	0.94	g21467 32	30	593	8.7e- 64	FK506- bindin g protei n - Arabid opsis thalia na [Arabi dopsis thalia na]
161916	ATU023 856	ATL8C4 6670:4 99..1	gap2	ATCEA4 S2421	83	ATL8C4 6670:4 49..20 4	0.89	g52970 7	30	131	1.2e- 09	(U1307 0) No defini tion line found [Caeno rhabdi tis; elegan s]
161917	ATU023 857	ATL8C4 2105:1 ..804	gap2	ATCEA4 S30952	83	ATL8C4 2105:6 6..544	0.84	g34618 39	30	450	2.4e- 46	(AC005 315) putati vé recept or protei n

161918	ATU023 858	ATL8C3 1713:1 ..624	gap2	ATCEA4 S4765	83	ATL8C3 1713:5 6..596	0.64	g40380 43	30	683	1.5e- 62	kinase [Arabi dopsis thalia na] (AC005 936) putati ve DNA- bindin g protei n [Arabi dopsis thalia na]
161919	ATU023 859	ATL8C8 920:1. .840	gap2	ATCEA4 S5905	83	ATL8C8 920:16 3..840	0.99					
161920	ATU023 860	ATL8C2 1649:1 100..8 68	gap2	ATCEA4 S10478	83	ATL8C2 1649:9 89..86 8	0.98					
161921	ATU023 861	ATL8S2 033:1. .181	gap2	ATCEA4 S12228	83	ATL8S2 033:42 ..159	0.97					
161922	ATU023 862	ATL8C3 2386:8 0..920	gap2	ATCEA4 S2593	83	ATL8C3 2386:8 0..920	0.95					
161923	ATU023 863	ATL8C6 804:17 6..907	gap2	ATCEA4 C9880_ 1	83	ATL8C6 804:48 0..671	0.95					
161924	ATU023 864	ATL8C4 3960:1 12..13 11	gap2	ATCEA4 C874_ 1	83	ATL8C4 3960:1 25..72 6	0.95					
161925	ATU023 865	ATL8C1 5553:1	gap2	ATCEA4 C32368	83, 82	ATL8C1 5553:2	0.94					

161934	ATU023 874	63	gap2	ATCEA4 S32443	83	50	0.88	g38941 98	100	588	1.5e- 38	(AC005 662) hypoth etical protein [Arabi dopsis thalia na]
161935	ATU023 875	ATL8C3 3591:1 537..6 22	gap2	ATCEA4 C6260 1	83	ATL8C3 7698:1 149..4 3	0.88					
161936	ATU023 876	ATL8C2 1129:1 170..1	gap2	ATCEA4 C59950 1	83	ATL8C2 1129:1 170..8	0.87					
161937	ATU023 877	ATL8C4 2328:1 6..977	gap2	ATCEA4 S4078	83	ATL8C4 2328:4 68..97 7	0.87					
161938	ATU023 878	ATL8C1 9853:4 2..932	gap2	ATCEA4 S14461	82	ATL8C1 9853:4 2..932	0.86					
161939	ATU023 879	ATL8C4 1944:1 966..1	gap2	ATCEA4 C2666 1	83	ATL8C4 1944:1 966..3 21	0.86					
161940	ATU023 880	ATL8S1 086:1. .621	gap2	ATCEA4 S8243	83	ATL8S1 086:50 ..72	0.86					
161941	ATU023 881	ATL8C2 3932:2 387..4 42	gap2	ATCEA4 C81931 1	83	ATL8C2 3932:2 387..4 42	0.86					
161942	ATU023 882	ATL8C3 2190:1 665..9	gap2	ATCEA4 S6199	83	ATL8C3 2190:1 631..9	0.85					

161966	ATU023 906	ATL8C4 3372:3 61..10 99	gap2	ATCEA4 S6599	83	ATL8C4 3372:3 61..10 99	0.75						
161967	ATU023 907	ATL8C3 6630:2 09..10 16	gap2	ATCEA4 C18433 _1	83	ATL8C3 6630:2 09..10 16	0.75						
161968	ATU023 908	ATL8C5 753:63 1..396	gap2	ATCEA4 S14826	83	ATL8C5 753:63 1..530	0.74						
161969	ATU023 909	ATL8C2 2880:5 93..48 06	gap2	ATCEA4 C34738 _1, ATCEA4 S24841	82, 82	ATL8C2 2880:8 05..42 75	0.74	941004 33, 927912 78	100, 84	582, 824	1.0e- 57, 3.2e- 83	(AF000 378) beta- glucos idase [Glyci ne max]; (Z6925 7) beta- xylosi dase [Hypoc rea jecori na]	
161970	ATU023 910	ATL8C2 9974:5 069..1 212	gap2	ATCEA4 S20314 , ATCEA4 C281_1	82, 82	ATL8C2 9974:4 918..1 243	0.74	945305 91, 928299 10, 936081 28	100, 56, 48	926, 795, 95	2.2e- 79, 2.2e- 78, 0.0002 3	(AF132 475) heme oxygen ase 1 [Arabi dopsis thalia na]; (AC002 291) Unknow	

161971	ATU023 911	ATL8C1 297:65 2..120	gap2	ATCEA4 C18115 1	83	ATL8C1 297:65 2..131	0.74					n protei n, contai ns regula tor of chromo some conden sation motifs [Arabi dopsis thalia na]; (AC005 314) hypoth etical protei n [Arabi dopsis thalia na]
161972	ATU023 912	ATL8C2 3799:1 450..4 48	gap2	ATCEA4 S3709	83	ATL8C2 3799:1 450..7 80	0.73					
161973	ATU023 913	ATL8S2 5913:1 ..639	gap2	ATCEA4 S27110 , ATCEA4 S33099	83, 82	ATL8S2 5913:1 36..26 8	0.73					
161974	ATU023 914	ATL8C3 8626:1	gap2	ATCEA4 S31948	83	ATL8C3 8626:1	0.71					

		88			ATCEA4	83		45												
161994	ATU023 934	ATL8S2 1060:5 19..44	gap2		ATCEA4 S32743	83		ATL8S2 1060:2 94..45	0.60											
161995	ATU023 935	ATL8S1 9978:6 28..1	gap2		ATCEA4 C19152 _1	83		ATL8S1 9978:4 41..28 0	0.59											
161996	ATU023 936	ATL8S1 0444:5 05..1	gap2		ATCEA4 C12559 2_1	83		ATL8S1 0444:5 05..98	0.59											
161997	ATU023 937	ATL8C4 6083:1 210..2 60	gap2		ATCEA4 C54758 _1	83		ATL8C4 6083:1 210..3 00	0.59											
161998	ATU023 938	ATL8C2 5245:5 38..1	gap2		ATCEA4 C41689 _1	83		ATL8C2 5245:4 89..15 9	0.58											
161999	ATU023 939	ATL8C4 6544:4 78..19 08	gap2		ATCEA4 S7139	82		ATL8C4 6544:1 836..5 32	0.58			100	1203	3.4e- 103				(AC003 000) unknown protein [Arabi dopsis thalia na]		
162000	ATU023 940	ATL8C2 5795:3 04..13 13	gap2		ATCEA4 S27404	83		ATL8C2 5795:3 04..11 12	0.57											
162001	ATU023 941	ATL8C9 383:86 ..1599	gap2		ATCEA4 S253	83		ATL8C9 383:86 ..1599	0.56											
162002	ATU023 942	ATL8C2 4352:6 ..1109	gap2		ATCEA4 S34456	83		ATL8C2 4352:6 ..869	0.55											
162003	ATU023	ATL8C4	gap2		ATCEA4	83		ATL8C4	0.54											

[illegible][illegible]

162187	ATU024 127	ATL8S2 4424:1 ..101	gap2	ATCEA4 C89152 1	83															
162188	ATU024 128	ATL8C7 621:28 2..384	gap2	ATCEA4 S34097 , ATCEA4 S32021	83, 82															
162189	ATU024 129	ATL8C2 2914:3 25..1	gap2	ATCEA4 C20187 1	83															
162190	ATU024 130	ATL8C4 6828:1 770..1 627	gap2	ATCEA4 S26000	83															
162191	ATU024 131	ATL8S3 0807:1 ..262	gap2	ATCEA4 C6624_	83															
162192	ATU024 132	ATL8C1 6855:9 60..11 60	gap2	ATCEA4 S35534	83															
162193	ATU024 133	ATL8S7 330:47 4..212	gap2	ATCEA4 S4458	83															
162194	ATU024 134	ATL8S2 2701:3 99..19 2	gap2	ATCEA4 S14662	83															
162195	ATU024 135	ATL8C3 7753:1 332..9 52	gap2	ATCEA4 S25983 , ATCEA4 S16338	83, 82															
162196	ATU024 136	ATL8C3 269:21 3..499	gap2	ATCEA4 S30523	83															
162197	ATU024 137	ATL8C4 0586:1 306..1	gap2	ATCEA4 S24146	83															

162209	ATU024 149	ATL8C4 2162:3 43..25	gap2	ATCEA4 S32170	83								
162210	ATU024 150	ATL8C2 4835:1 812..1 514	gap2	ATCEA4 S11510	83								
162211	ATU024 151	ATL8S2 2685:2 29..54	gap2	ATCEA4 S34825	83								
162212	ATU024 152	ATL8C3 9721:1 ..94	gap2	ATCEA4 S26007	83								
162213	ATU024 153	ATL8C4 5050:4 08..1	gap2	ATCEA4 S10444	83								
162214	ATU024 154	ATL8S8 065:1. .368	gap2	ATCEA4 S27673	83								
162215	ATU024 155	ATL8S8 073:39 7..2	gap2	ATCEA4 S16096	83								
162216	ATU024 156	ATL8C4 5067:1 593..1 358	gap2	ATCEA4 S24921	83								
162217	ATU024 157	ATL8S8 083:56 0..200	gap2	ATCEA4 S14662	83								
162218	ATU024 158	ATL8S1 7457:2 52..1	gap2	ATCEA4 C62656 1	83								
162219	ATU024 159	ATL8S1 447:48 ..353	gap2	ATCEA4 S25896 , ATCEA4 S21003	83, 83								
162220	ATU024 160	ATL8C1 0048:1 59..27	gap2	ATCEA4 S17201	83								

162232	ATU024 172	ATL8C3 760:12 22..13 22	gap2	ATCEA4 C79449 _1	83												
162233	ATU024 173	ATL8C1 3914:5 514..5 714	gap2	ATCEA4 S12562	83												
162234	ATU024 174	ATL8C1 4824:3 77..65 2	gap2	ATCEA4 S11406	83												
162235	ATU024 175	ATL8C1 263:17 8..273	gap2	ATCEA4 S12797	83												
162236	ATU024 176	ATL8C1 7026:3 434..3 134	gap2	ATCEA4 S18841	83												
162237	ATU024 177	ATL8C4 203:26 25..17 95	gap2	ATCEA4 S6529	83												
162238	ATU024 178	ATL8C4 5310:1 71..50 8	gap2	ATCEA4 S20120	83												
162239	ATU024 179	ATL8S2 9179:1 ..269	gap2	ATCEA4 S23841	83												
162240	ATU024 180	ATL8S8 711:30 3..1	gap2	ATCEA4 S294	83												
162241	ATU024 181	ATL8C4 5202:2 56..30 16	gap2	ATCEA4 S30978	82												(Z9733 5) diseas e resist ance protei

[illegible]

[illegible]

162293	ATU024 233	ATL8C3 5640:3 498..2 404	gap2	ATCEA4 S33986	82	ATL8C3 5640:3 498..2 404	0.96	g11731 87	99	605	8.0e- 56	248) hypoth etical protein [Arabi dopsis thalia na]
162294	ATU024 234	ATL8C3 4278:1 ..1276	gap2	ATCEA4 C21453 _1	82	ATL8C3 4278:6 0..127 6	0.82	g17084 20	99	1194	1.3e- 83	ISOFLA VONE REDUCT ASE HOMOLO G P3 [Arabi dopsis thalia na]
162295	ATU024 235	ATL8C1 4794:7 00..14 9	gap2	ATCEA4 C41409 _1	82	ATL8C1 4794:2 60..14 9	0.64	g22666 1	99	148	1.2e- 07	trnA intron ORE 109 [Oryza sativa]
162296	ATU024 236	ATL8C4 8719:1 514..6 50	gap2	ATCEA4 S31910	82			g22621 76	99	211	5.5e- 16	(AC002 329) putati ve

162297	ATU024 237	ATL8C2 3400:1 ..4349	gap2	ATCEA4 S60	82		ATL8C2 3400:6 9..412 3	0.63		g47739 20, g43097 64, g42635 44	93, 65, 65	2556, 979, 329	5.6e- 243, 2.3e- 101, 1.5e- 32		RING zinc- finger protein [Arabi dopsis thalia na]
															(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]; (AC006 217) putati ve retroe lement integr ase [Arabi dopsis thalia na]; (AC006 250) putati ve Athila retroe lement ORF1

162298	ATU024 238	ATL8C4 5616:2 048..1 472	gap2	ATCEA4 S30452	82	ATL8C4 5616:1 909..1 472	0.51	g33554 68	91	79	0.0008 6	prote n [Arabi dopsis thalia na]
162299	ATU024 239	ATL8C1 2863:1 723..6 79	gap2	ATCEA4 S8369	82			g31933 17	90	1654	7.8e- 153	(AF069 299) simila r to plant chalco ne and stilbe ne syntha ses [Arabi dopsis thalia na]
162300	ATU024 240	ATL8C1 0976:4 070..1 545	gap2	ATCEA4 C64837 _1	82	ATL8C1 0976:3 969..1 718	0.69	g46783 36	88	704	5.2e- 71	(AL049 658) putati ve protei n [Arabi

162301	ATU024 241	ATL8C3 3438:1 ..2322	gap2	ATCEA4 C57905 _1	82						g38735 50	86	80	0.89	dopsis thalia nal (AL033 534) serine -rich protei n [Schiz osacch aromyc es pombe]
162302	ATU024 242	ATL8C3 4070:1 709..2 636	gap2	ATCEA4 S3569	82				ATL8C3 4070:1 709..2 595	0.67	g44552 97	85	712	5.9e- 73	(AL035 528) hypoth etical protei n [Arabi dopsis thalia nal]
162303	ATU024 243	ATL8C2 5665:1 063..1	gap2	ATCEA4 C960_1	82						g26687 44	84	406	2.1e- 41	(AF034 946) ubiqui tin conj ating enzyme [Zea mays]
162304	ATU024 244	ATL8C3 7230:1 ..956	gap2	ATCEA4 S5306	82				ATL8C3 7230:3 77..95 6	0.89	g45862 65	82	563		(AL049 640) putati ve protei n [Arabi

162305	ATU024 245	ATL8C3 6439:1 891..1 68	gap2	ATCEA4 S13955	82	ATL8C3 6439:1 891..1 68	0.87	g32876 93	82	1769	8.5e- 181	dopsis thalia nal (AC003 979) Simila r to LIM17 gene produc t gb 165 3769 from the genome of Synech ocysti s sp. gb D90 916. [Arabi dopsis thalia nal
162306	ATU024 246	ATL8C2 623:33 84..19 4	gap2	ATCEA4 C42561 _1	82			g33778 37, g45126 29	81, 52	465, 809	9.2e- 55, 4.9e- 84	(AF075 598) No defini tion line found [Arabi dopsis thalia nal]; (AC004 793) EST

162307	ATU024 247	ATL8C5 730:12 7..655	gap2	ATCEA4 C52513 _2	82					g43357 63	78	239		gb Z33 866 comes from this gene. [Arabi dopsis thalia na]
162308	ATU024 248	ATL8C4 2261:2 617..1	gap2	ATCEA4 S33179	82					g42630 62, g44328 07	75, 30	405, 1452	9.7e- 40, 6.2e- 101	(AC006 284) unknown protein [Arabi dopsis thalia na] (AC005 142) hypoth etical protein [Arabi dopsis thalia na]; (AC006 570) putative polypro tein [Arabi dopsis thalia na]

162309	ATU024 249	ATL8C1 8234:1 829..1	gap2	ATCEA4 S27636	82	ATL8C1 8234:1 735..1 81	0.89	g38920 60	74	1949	1.8e- 190	(AC002 330) hypoth etical protei n [Arabi dopsis thalia na]
162310	ATU024 250	ATL8C2 2510:7 75..16	gap2	ATCEA4 S33825	82	ATL8C2 2510:5 10..18 7	0.52	g40564 99	74	332	1.9e- 24	(AC005 896) unknow n protei n [Arabi dopsis thalia na]
162311	ATU024 251	ATL8C1 6035:2 749..8 52	gap2	ATCEA4 S1006	82	ATL8C1 6035:2 094..8 52	0.91	g42630 63	73	2341	1.0e- 214	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
162312	ATU024 252	ATL8C1 9281:2 738..1	gap2	ATCEA4 C23128 _1	82	ATL8C1 9281:2 186..6 2	0.73	g48503 99	72	1443	2.8e- 102	(AC007 357) F3F19. 18 [Arabi dopsis thalia na]
162313	ATU024 253	ATL8C1 1585:4	gap2	ATCEA4 S33179	82			g42630 62	72	442	3.5e- 36	(AC005 142)

162314	ATU024 254	ATL8C4 8513:1 548..1 90	gap2	ATCEA4 C600_3	82	ATL8C4 8513:1 536..3 96	0.80	g22431 24	71	851	1.2e- 67	(Y1084 7) O- acetyl serine (thiol) lyase [Brass ica juncea)
162315	ATU024 255	ATL8C4 8367:1 ..2874	gap2	ATCEA4 C9316_1	82	ATL8C4 8367:6 2..145 4	0.93	g18715 26, g22528 28	70, 60	704, 216	2.7e- 63, 2.5e- 08	(X8199 7) leucin e- rich- repeat proteol n [Helia nthus annuus]; (AF013 293) No defini tion line found [Arabi dopsis

162316	ATU024 256	ATL8C8 262:12 11..47 1	gap2	ATCEA4 S3569	82					g44552 97	70	692	9.4e- 67	thalia na] (AL035 528) hypoth etical protei n [Arabi dopsis thalia na]
162317	ATU024 257	ATL8C2 2379:1 ..2684	gap2	ATCEA4 S33179	82	ATL8C2 2379:1 7..127 8, ATL8C2 2379:2 414..1 713	0.76, 0.72	g42630 62, g44328 07	69, 32	350, 2360	7.3e- 26, 2.6e- 209	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]; (AC006 570) putati ve polypr oteins [Arabi dopsis thalia na]		
162318	ATU024 258	ATL8C3 3314:1 256..1	gap2	ATCEA4 S11948	82	ATL8C3 3314:1 256..3 44	0.51	g22136 32	69	982	1.9e- 95	(AC000 103) F21J9. 24 [Arabi dopsis thalia na]		

162319	ATU024 259	ATL8C2 205:1. .1195	gap2	ATCEA4 S203	82				g42635 45	68	1046	1.1e- 101	(AC006 250) putati ve Athila retro element ORF1 protei n [Arabi dopsis thalia na]
162320	ATU024 260	ATL8C3 5003:1 ..1475	gap2	ATCEA4 S11809	82	ATL8C3 5003:2 12..14 67	0.91		g40380 30	67	513	6.0e- 50	(AC005 936) putati ve protei n kinase , 5' partia l [Arabi dopsis thalia na]
162321	ATU024 261	ATL8C1 9394:1 064..1	gap2	ATCEA4 S34354	82	ATL8C1 9394:1 003..1 02	0.60		g45443 76	67	1774	3.1e- 183	(AC006 920) unknow n protei n [Arabi dopsis thalia na]
162322	ATU024 262	ATL8C3 2418:2	gap2	ATCEA4 S26452	82	ATL8C3 2418:2	0.90		g31933 00	66	1518	1.3e- 144	(AF069 298)

162323	ATU024 263	353..1	gap2	ATCEA4 S27636	82		261..3 01	0.43	g22448 64	65	1988	6.6e- 179	No defini tion line found [Arabi dopsis thalia na]
		ATL8C3 0394:1 ..1966					ATL8C3 0394:3 3..180 7						(Z9733 7) hypoth etical protei n [Arabi dopsis thalia na]
162324	ATU024 264	ATL8C4 1790:8 436..1	gap2	ATCEA4 S11875	82		ATL8C4 1790:8 161..1 94	0.68	g33778 34, g42637 68	64, 34	1467, 281	2.2e- 140, 5.5e- 21	No defini tion line found [Arabi dopsis thalia na]; (AC006 218) hypoth etical protei n [Arabi dopsis thalia na]

162325	ATU024 265	ATL8C1 3302:1 928..1	gap2	ATCEA4 C2039_1	82	ATL8C1 3302:1 275..1 75	0.69	g24627 81	63	739	3.2e- 67	(U7317 5) carbam oyl phosph ate synthe tase small subuni t [Arabi dopsis thalia na]
162326	ATU024 266	ATL8S1 4566:1 ..417	gap2	ATCEA4 S29197	82			g22621 76	63	156	7.3e- 15	(AC002 329) putati ve RING zinc- finger protei n [Arabi dopsis thalia na]
162327	ATU024 267	ATL8C4 1080:1 11..88 6	gap2	ATCEA4 S15282	82	ATL8C4 1080:1 18..72 3	0.57	g17031 29	62	936	3.8e- 101	ACTIN 11 [Arabi dopsis thalia na]
162328	ATU024 268	ATL8C1 3999:1 978..3 344	gap2	ATCEA4 S13040	82			g28530 88	62	235	1.4e- 08	(AL021 768) hypoth etical protei n

162329	ATU024 269	ATL8C2 499:1. .1375	gap2	ATCEA4 C26069 _1	82		ATL8C2 499:52 ..1375	0.86	g40990 90	60	1309	3.9e- 130	[Arabi dopsis thalia na] (U8317 8) unknown [Arabi dopsis thalia na]
162330	ATU024 270	ATL8C9 208:97 4..1	gap2	ATCEA4 S2231	82		ATL8C9 208:97 4..111	0.63	g48039 60	60	322		(AC006 202) putati ve carbon ic anhydr ase [Arabi dopsis thalia na]
162331	ATU024 271	ATL8C1 7719:1 ..1018	gap2	ATCEA4 S12245	82		ATL8C1 7719:2 05..98 5	0.61	g28298 90	60	587	4.9e- 62	(AC002 396) Hypoth etical protei n [Arabi dopsis thalia na]
162332	ATU024 272	ATL8C5 0077:1 0848.. 7636	gap2	ATCEA4 S11406	82		ATL8C5 0077:1 0714.. 9058	0.48	g46999 38, g47739 10	60, 55	330, 163	1.3e- 33, 0.0082	(AC007 166) hypoth etical protei n

162333	ATU024 273	ATL8S2 5681:6 69..1	gap2	ATCEA4 S34354	82						g45443 74	59	521	1.7e- 61	[Arabi dopsis thalia na]; (AF147 259) No defini tion line found [Arabi dopsis thalia na]
162334	ATU024 274	ATL8C2 1413:6 82..97 7	gap2	ATCEA4 S22571	82						g47047 30	59	226	2.1e- 11	(AC006 920) unknow n protei n [Arabi dopsis thalia na]
162335	ATU024 275	ATL8C1 578:13 86..37 9	gap2	ATCEA4 S2118	82					ATL8C1 578:12 73..37 9	g38853 31	58	957	2.2e- 96	(AF121 355) peroxi redoxi n TPx1 [Arabi dopsis thalia na]
															(AC005 623) putati ve cytoch rome

162336	ATU024 276	ATL8C1 5053:1 ..4297	gap2	ATCEA4 S203	82					g40068 33	57	2522	1.2e- 263	p450 protei n [Arabi dopsis thalia na] (AC005 970) putati ve revers e transc riptas e [Arabi dopsis thalia na]
162337	ATU024 277	ATL8C3 2404:1 489..1	gap2	ATCEA4 S3937	82	ATL8C3 2404:1 422..1 048	0.98			g47739 10	55	138	4.0e- 09	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
162338	ATU024 278	ATL8C7 857:37 78..12 84	gap2	ATCEA4 S6559	82	ATL8C7 857:36 50..14 29	0.76			g45824 87	55	2553	3.2e- 249	(AL021 768) resist ence protei n-like [Arabi dopsis thalia na]

162346	ATU024 286	ATL8C4 2062:1 ..4012	gap2	ATCEA4 S12828	82	ATL8C4 2062:1 66..64 8, ATL8C4 2062:2 253..3 642	0.72, 0.97	g33778 16, g42635 45	49, 32	1318, 601	3.2e- 129, 5.8e- 35	na] (AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]; (AC006 250) putati ve Athila retroe lement ORF1 protei n [Arabi dopsis thalia na] (Z9733 7) hypoth etical
162347	ATU024 287	ATL8C1 7236:1 380..3	gap2	ATCEA4 S6772	82	ATL8C1 7236:7 35..10 5	0.55	g22448 64	49	1751	5.7e- 171	(Z9733 7) hypoth etical

162348	ATU024 288	ATL8C3 4299:1 ..2102	gap2	ATCEA4 C25567 _2	82		ATL8C3 4299:6 6..111 3	0.85	g44551 79	48	230	1.5e- 17	protein [Arabi dopsis thalia na]
162349	ATU024 289	ATL8C1 6322:3 55..16 03	gap2	ATCEA4 S2178	82		ATL8C1 6322:3 55..13 77	0.66	g22447 52	48	406	1.8e- 36	(Z9733 5) hypoth etical protein [Arabi dopsis thalia na]
162350	ATU024 290	ATL8C4 5058:2 5..514	gap2	ATCEA4 S813	82				g32585 73	48	166	5.6e- 25	(U8995 9) Hypoth etical protein [Arabi dopsis thalia na]
162351	ATU024 291	ATL8C1 8800:1 ..2234	gap2	ATCEA4 S33179	82		ATL8C1 8800:1 129..1 179	0.85	g42630 62, g44328 02	47, 31	275, 936	2.8e- 19, 4.5e- 73	(AC005 142) hypoth etical

162352	ATU024 292	ATL8C3 3749:1 349..4 373	gap2	ATCEA4 S980	82	ATL8C3 3749:1 349..4 337	0.83	g28282 80	47	1137	9.1e- 102	protein [Arabi dopsis thalia na]; (AC006 437) putati ve pol ypr otein, 5' partia l [Arabi dopsis thalia na]
162353	ATU024 293	ATL8C3 2689:1 ..1079	gap2	ATCEA4 S1460	82	ATL8C3 2689:4 62..10 68	0.71	g32692 87	47	601	5.9e- 67	(AL030 978) GH3 like protei n [Arabi dopsis thalia na]
162354	ATU024	ATL8C1	gap2	ATCEA4	82	ATL8C1	0.69	g21296	47	962	1.2e-	phosph

294	151:11 62..1	S11887	151:10 12..41	70	77	oinosi tide- specif ic phosph olipas e C - Arabid opsis thalia na [Arabi dopsis thalia na]						
162355	ATU024 295	ATL8C1 3170:1 022..1 07	gap2	ATCEA4 C32376 _3	82	ATL8C1 3170:9 24..14 5	0.65	g23524 92	47	783	2.4e- 76	(AF005 047) transp ort inhibi tor respon se l [Arabi dopsis thalia na]
162356	ATU024 296	ATL8C9 744:94 9..1	gap2	ATCEA4 S25008	82	ATL8C9 744:89 0..231	0.47	g22621 05	47	909	7.0e- 86	(AC002 343) unknow n protei n [Arabi dopsis thalia na]
162357	ATU024 297	ATL8C4 856:1. .1342	gap2	ATCEA4 S4351	82			g21911 53	46	296	7.6e- 34	(AF007 269) contai

162358	ATU024 298	ATL8C7 323:13 20..51 8	gap2	ATCEA4 S26031	82	ATL8C7 323:12 69..53 9	0.58	g22135 90	45	373	1.0e- 36	ns similarity to blue copper proteins [Arabidopsis thaliana]
162359	ATU024 299	ATL8C3 251:1. .1507	gap2	ATCEA4 C8001_1	82			g46461 98	45	111	2.2e- 10	(AC007 230) T23K8. 6 [Arabidopsis thaliana]
162360	ATU024 300	ATL8C3 2172:2 740..1 803	gap2	ATCEA4 S25010	82	ATL8C3 2172:2 494..1 803	0.67	g21296 67	44	1212	2.8e- 125	pectin esterase (EC 3.1.1. 11) 2 precursor - Arabidopsis thaliana (fragm

162361	ATU024 301	ATL8C3 0773:1 078..1	gap2	ATCEA4 S31550	82		ATL8C3 0773:9 31..12 9	0.70	945875 13	43	1091	5.2e- 114	(AC007 060) Contai ns eukary otic protei n kinase domain PF 000 69. [Arabi dopsis thalia na]
162362	ATU024 302	ATL8C2 6665:1 ..862	gap2	ATCEA4 S7102	82		ATL8C2 6665:6 20..71 0	0.58	931933 04	43	465	2.7e- 28	(AF069 298) contai ns simila rity to RNA recogn ition motifs (Pfam: rrm.hm m, score; 82.09 and 30.80) ; simila

162363	ATU024 303	ATL8C2 3009:9 35..16 4	gap2	ATCEA4 C57357 _1	82	ATL8C2 3009:6 22..16 4	0.44	g26606 73	43	510	1.1e- 45	r to altern ative splici ng factor ASF [Arabi dopsis thalia na]
162364	ATU024 304	ATL8C2 6112:3 18..12 04	gap2	ATCEA4 S17423	82	ATL8C2 6112:4 18..98 4	0.99	g18175 44	42	937	3.0e- 96	(D8302 5) prolin e oxidas e precu sor [Arabi dopsis thalia na]
162365	ATU024 305	ATL8C9 91:210 9..489	gap2	ATCEA4 C25140 _3	82	ATL8C9 91:181 4..489	0.70	g39134 25	42	1141	3.2e- 123	PUTATI VE PRE- MRNA SPLICI NG FACTOR

162366	ATU024 306	ATL8C4 6030:3 835..3 106	gap2	ATCEA4 C13636 9_1	82	ATL8C4 6030:3 726..3 106	0.54	g43760 88	42	715	1.1e- 60	ATP- DEPEND ENT RNA HELICA SE [Arabi dopsis thalia nal] (Z9970 7) cytoch rome P450- like protei n [Arabi dopsis thalia nal]
162367	ATU024 307	ATL8C1 8071:2 030..1	gap2	ATCEA4 C10115 6_1	82	ATL8C1 8071:2 004..8 22	0.88	g37765 57	40	657	1.2e- 56	(AC005 388) Contai ns simila rity to [Arabi dopsis thalia nal]
162368	ATU024 308	ATL8C4 5543:8 40..1	gap2	ATCEA4 C5439_1	82	ATL8C4 5543:7 62..48	0.59	g44067 80	40	1035	2.6e- 85	(AC006 532) putati ve multis pannin g

162369	ATU024 309	ATL8C4 4369:1 ..391	gap2	ATCEA4 S33854	82						g48039 33	40	353	5.0e- 20	(AC006 264) putati ve diseas e resist ance respon se protei n [Arabi dopsis thalia na]
162370	ATU024 310	ATL8C2 2610:6 02..21 6	gap2	ATCEA4 C60319 _1	82						g48949 14	40	204	2.9e- 16	(AF139 188) HCF106 [Arabi dopsis thalia na]
162371	ATU024 311	ATL8C9 784:16 18..82 0	gap2	ATCEA4 C92759 _1	82	ATL8C9 784:16 18..98 5	0.81	g68494 2	39	93	0.0007 7	(U2073 6) S- adenos yl-L- methio nine:t rans- caffeo yl-CoA			

162372	ATU024 312	ATL8S2 3861:1 ..754	gap2	ATCEA4 C21366 1, ATCEA4 S26348	82, 82	ATL8S2 3861:5 1..737	0.68	g39708 80	39	134	0.0003 6	(AB015 724) nuclea r recept or bindin g factor -1 [Rattus norvegicus]	3-O- methyl transf erase [Medic ago sativa subsp. sativa]
162373	ATU024 313	ATL8C2 1691:2 735..3 550	gap2	ATCEA4 S27393	82			g33778 30	39	745	2.5e- 59	(AF075 598) contai ns simi larity to Aplysi a califo rnic interm ediate filame nt protei	

162374	ATU024 314	ATL8S2 195:47 0..1	gap2	ATCEA4 S32611	82							g45862 65	39	296	1.0e- 30	n A (GB:X6 0297) [Arabi dopsis thalia na]
162375	ATU024 315	ATL8C3 0096:3 64..96 3	gap2	ATCEA4 C423_1	82							g39285 43	38	642	1.5e- 65	(AL049 640) putati ve protei n [Arabi dopsis thalia na]
162376	ATU024 316	ATL8C2 5125:1 730..2 59	gap2	ATCEA4 S7724	82							g44907 04	36	493	1.4e- 31	(AB016 819) UDP- glucos e glucos yltran sferas e [Arabi dopsis thalia na]
																(AL035 680) putati ve protei n [Arabi dopsis thalia na]

162377	ATU024 317	ATL8C4 1964:1 ..4702	gap2	ATCEA4 S23796	82	ATL8C4 1964:6 87..96 3, ATL8C4 1964:2 841..4 702	0.68, 0.88	g49268 20	35	185	5.0e- 11	(AC004 135) T17H7. 5 [Arabi dopsis thalia na]
162378	ATU024 318	ATL8S1 6486:5 86..1	gap2	ATCEA4 S30616	82	ATL8S1 6486:3 10..56	0.87	g45861 05	34	270	8.6e- 13	(AL049 638) putati ve protei n [Arabi dopsis thalia na]
162379	ATU024 319	ATL8C4 7142:1 ..3047	gap2	ATCEA4 C7633- 1	82	ATL8C4 7142:1 76..71 8	0.40	g45812 01	34	726	3.7e- 67	(Y1791 1) cyclic nucleo tide and calmod ulin- regula ted ion channe l [Arabi dopsis thalia na]
162380	ATU024 320	ATL8C3 2686:1 ..582	gap2	ATCEA4 S1312	82			g44551 99	34	719	1.5e- 72	(AL035 440) putati ve protei

162381	ATU024 321	ATL8C9 625:66 2..1	gap2	ATCEA4 C49517 _1	82	ATL8C9 625:57 8..106	0.77	g46512 02	33	514	2.7e- 49	n [Arabi dopsis thalia na] (AB026 253) copper amine oxidas e [Pisum sativu m]
162382	ATU024 322	ATL8S2 6567:1 ..597	gap2	ATCEA4 C1828 _1	82			g40931 53	33	432		(AF088 280) phytoc hrome- associ ated protei n 3 [Arabi dopsis thalia na]
162383	ATU024 323	ATL8C4 604:34 3..1	gap2	ATCEA4 C24035 _2	82			g13524 60	33	174	5.7e- 18	IN2-1 PROTEI N [Zea mays]
162384	ATU024 324	ATL8C1 2697:1 070..1 52	gap2	ATCEA4 S2753	82			g45394 30	33	95	9.0e- 07	(AL049 171), putati ve protei n [Arabi dopsis thalia na]

162385	ATU024 325	ATL8C2 4900:1 ..676	gap2	ATCEA4 C8151_1	82	ATL8C2 4900:2 90..56 3	0.86	g19316 40	32	451	1.1e- 49	na] (U9597 3) Serine carbox ypepti dase isolog [Arabi dopsis thalia na]
162386	ATU024 326	ATL8C1 2576:1 ..2647	gap2	ATCEA4 C24346 _1	82	ATL8C1 2576:1 50..24 35	0.73	g22246 05	30	281	8.3e- 23	(AB002 330) KIAA03 32 [Homo sapien s]
162387	ATU024 327	ATL8C3 451:1. ..515	gap2	ATCEA4 S21603	82	ATL8C3 451:29 8..390	0.58	g11685 30	30	278	4.1e- 16	SERINE /THREO NINE- PROTEI N KINASE ASK2 [Arabi dopsis thalia na]
162388	ATU024 328	ATL8C1 6698:1 ..7162	gap2	ATCEA4 S4836	82	ATL8C1 6698:1 05..24 25, ATL8C1 6698:5 846..3 186, ATL8C1 6698:6	0.56, 0.78, 0.90	g42638 31	30	1353	1.2e- 128	(AC006 067) putati ve revers e transc riptas e [Arabi

[illegible]

162418	ATU024 358	ATL8S3 0038:6 1..596	gap2	ATCEA4 C17218 _2	82	ATL8S3 0038:2 32..31 5	0.86				
162419	ATU024 359	ATL8C4 1942:1 60..87 5	gap2	ATCEA4 S29657	82	ATL8C4 1942:1 60..87 5	0.86				
162420	ATU024 360	ATL8C1 9211:1 ..797	gap2	ATCEA4 C373_1	82	ATL8C1 9211:1 21..76 6	0.85				
162421	ATU024 361	ATL8C2 8217:8 76..31 2	gap2	ATCEA4 C61607 _1	82	ATL8C2 8217:8 18..31 2	0.85				
162422	ATU024 362	ATL8C2 0661:7 1..214 0	gap2	ATCEA4 C10213 4_1	82	ATL8C2 0661:7 1..184 8	0.84				
162423	ATU024 363	ATL8C1 277:50 6..781	gap2	ATCEA4 S26431	82	ATL8C1 277:60 4..770	0.82				
162424	ATU024 364	ATL8C9 975:1. .379	gap2	ATCEA4 C55467 1, ATCEA4 C53931 1, ATCEA4 S8141	82, 82, 82	ATL8C9 975:10 7..379	0.82				
162425	ATU024 365	ATL8C8 463:72 0..14	gap2	ATCEA4 S16658	82	ATL8C8 463:72 0..14	0.82				
162426	ATU024 366	ATL8C2 2656:1 289..5 29	gap2	ATCEA4 C9181_1	82	ATL8C2 2656:1 194..1 109	0.79				
162427	ATU024 367	ATL8C3 3204:7	gap2	ATCEA4 C598_4	82, 82	ATL8C3 3204:7	0.78				

		1..112 2		' ATCEA4 C598 2		1..106 9						
162428	ATU024 368	ATL8C3 2133:2 723..1 813	gap2	ATCEA4 C23116 _1	82	ATL8C3 2133:2 723..2 467	0.78					
162429	ATU024 369	ATL8C1 221:25 05..22 06	gap2	ATCEA4 S11817	82	ATL8C1 221:23 51..22 06	0.78					
162430	ATU024 370	ATL8C1 381:14 92..45	gap2	ATCEA4 S32628	82	ATL8C1 381:14 92..30 9	0.74					
162431	ATU024 371	ATL8C1 7942:4 57..1	gap2	ATCEA4 C73258 1	82	ATL8C1 7942:4 15..8	0.73					
162432	ATU024 372	ATL8C4 6824:2 674..1 162	gap2	ATCEA4 S32628	82	ATL8C4 6824:2 674..1 162	0.73					
162433	ATU024 373	ATL8C3 4253:3 856..7 48	gap2	ATCEA4 S32106	82	ATL8C3 4253:3 584..7 48	0.71					
162434	ATU024 374	ATL8C8 805:45 9..200 1	gap2	ATCEA4 S36	82	ATL8C8 805:45 9..200 1	0.70					
162435	ATU024 375	ATL8C3 9887:7 61..21 8	gap2	ATCEA4 S13576	82	ATL8C3 9887:7 17..21 8	0.70					
162436	ATU024 376	ATL8C3 8349:6 86..18 0	gap2	ATCEA4 S10724	82	ATL8C3 8349:6 08..18 0	0.70					
162437	ATU024 377	ATL8C1 8304:1	gap2	ATCEA4 C43837	82	ATL8C1 8304:1	0.69					

		65..1	gap2	1	ATCEA4	82	60..59	0.69					
162438	ATU024 378	ATL8C1 5904:3 33..11 18	gap2	ATCEA4 S34649	82	ATL8C1 5904:3 33..11 18	0.69						
162439	ATU024 379	ATL8C4 3354:4 32..13 29	gap2	ATCEA4 C30135 1	82	ATL8C4 3354:8 65..13 29	0.68						
162440	ATU024 380	ATL8C4 3589:5 69..79 1	gap2	ATCEA4 C24778 2	82	ATL8C4 3589:5 69..72 0	0.68						
162441	ATU024 381	ATL8C2 4387:1 938..1 335	gap2	ATCEA4 S7033	82	ATL8C2 4387:1 817..1 335	0.68						
162442	ATU024 382	ATL8C6 150:43 13..30 54	gap2	ATCEA4 S11406	82	ATL8C6 150:43 13..30 54	0.67						
162443	ATU024 383	ATL8C4 747:28 6..661	gap2	ATCEA4 S30739	82	ATL8C4 747:29 7..661	0.66						
162444	ATU024 384	ATL8C2 1246:7 2..678	gap2	ATCEA4 C36760 1	82	ATL8C2 1246:7 2..172	0.66						
162445	ATU024 385	ATL8C2 8366:2 98..50 0	gap2	ATCEA4 S31942	82	ATL8C2 8366:3 37..47 0	0.66						
162446	ATU024 386	ATL8C4 5243:1 22..88 8	gap2	ATCEA4 S25048	82	ATL8C4 5243:1 22..63 9	0.63						
162447	ATU024 387	ATL8C4 6810:5 80..86 6	gap2	ATCEA4 C2387 1	82	ATL8C4 6810:5 80..86 6	0.62						
162448	ATU024	ATL8C3	gap2	ATCEA4	82	ATL8C3	0.61						

		..302		_1		26..20						
162460	ATU024 400	ATL8C1 7616:2 186..1 193	gap2	ATCEA4 S33626	82	ATL8C1 7616:2 186..1 193	0.47					
162461	ATU024 401	ATL8C3 6826:1 87..38 6	gap2	ATCEA4 S7282	82	ATL8C3 6826:2 14..38 6	0.46					
162462	ATU024 402	ATL8S1 249:1. .492	gap2	ATCEA4 S27399	82	ATL8S1 249:13 0..492	0.45					
162463	ATU024 403	ATL8S2 0541:3 89..27 1	gap2	ATCEA4 S29972	82	ATL8S2 0541:3 84..27 5	0.44					
162464	ATU024 404	ATL8C3 2594:6 40..90 3	gap2	ATCEA4 C7661_ 1	82	ATL8C3 2594:7 40..85 3	0.43					
162465	ATU024 405	ATL8C1 1084:1 09..47 7	gap2	ATCEA4 S34269	82	ATL8C1 1084:1 09..47 7	0.42					
162466	ATU024 406	ATL8C1 4748:3 518..2 459	gap2	ATCEA4 S11948	82	ATL8C1 4748:3 518..2 459	0.41					
162467	ATU024 407	ATL8C1 0713:8 81..70 3	gap2	ATCEA4 S1643	82							
162468	ATU024 408	ATL8S2 875:1. .120	gap2	ATCEA4 S9920	82							
162469	ATU024 409	ATL8C2 0307:2 69..1	gap2	ATCEA4 C925_ 1	82							
162470	ATU024	ATL8S2	gap2	ATCEA4	82							

162481	ATU024 421	924 ATL8S2 8801:6 83..53 6	gap2	ATCEA4 C98207 _1	82															
162482	ATU024 422	ATL8C1 0416:2 619..2 040	gap2	ATCEA4 S28620	82															
162483	ATU024 423	ATL8C1 0847:1 ..351	gap2	ATCEA4 S114	82															
162484	ATU024 424	ATL8S6 162:10 3..1	gap2	ATCEA4 C66617 _1	82															
162485	ATU024 425	ATL8C4 3804:1 597..1 389	gap2	ATCEA4 S23525	82															
162486	ATU024 426	ATL8C4 416:78 6..396	gap2	ATCEA4 S7950	82															
162487	ATU024 427	ATL8C3 3833:1 ..257	gap2	ATCEA4 C10213 4 1	82															
162488	ATU024 428	ATL8C4 1744:2 036..2 362	gap2	ATCEA4 S3931	82															
162489	ATU024 429	ATL8S2 9178:8 3..349	gap2	ATCEA4 S4954	82															
162490	ATU024 430	ATL8C1 2658:3 30..19 1	gap2	ATCEA4 S11274	82															
162491	ATU024 431	ATL8C1 8172:7 08..47 8	gap2	ATCEA4 S3465	82															

162492	ATU024 432	ATL8C4 1758:1 980..1 617	gap2	ATCEA4 S126	82															
162493	ATU024 433	ATL8C3 4115:2 26..44 9	gap2	ATCEA4 S28507	82															
162494	ATU024 434	ATL8C2 0650:1 192..7 81	gap2	ATCEA4 C11258 _1	82															
162495	ATU024 435	ATL8S3 0009:4 85..90	gap2	ATCEA4 S29911	82															
162496	ATU024 436	ATL8C3 4235:1 10..54 0	gap2	ATCEA4 S29864	82															
162497	ATU024 437	ATL8C4 1518:2 01..39 4	gap2	ATCEA4 S10621	82															
162498	ATU024 438	ATL8C2 1865:1 29..25 6	gap2	ATCEA4 S30727	82															
162499	ATU024 439	ATL8C4 6538:5 92..10 26	gap2	ATCEA4 C8526_ 1	82															
162500	ATU024 440	ATL8C3 90:515 ..1	gap2	ATCEA4 C9880_ 1	82															
162501	ATU024 441	ATL8C3 7808:8 82..60 9	gap2	ATCEA4 C13665 _1	82															
162502	ATU024 442	ATL8C1 7106:1	gap2	ATCEA4 S26576	82															

162525	ATU024 465	ATL8S4 064:1.159	gap2	ATCEA4 S30263	82														
162526	ATU024 466	ATL8C4 751:84 4..432	gap2	ATCEA4 S23238	82														
162527	ATU024 467	ATL8S1 1645:1 71..1	gap2	ATCEA4 C48854 1	82														
162528	ATU024 468	ATL8C3 3979:3 76..1	gap2	ATCEA4 C20594 1	82														
162529	ATU024 469	ATL8C2 9959:2 29..1	gap2	ATCEA4 S195	82														
162530	ATU024 470	ATL8C1 833:53 4..886	gap2	ATCEA4 S11248	82														
162531	ATU024 471	ATL8S4 248:40 7..276	gap2	ATCEA4 S14662	82														
162532	ATU024 472	ATL8S4 277:28 9..1	gap2	ATCEA4 S8243	82														
162533	ATU024 473	ATL8C4 2522:3 09..74 4	gap2	ATCEA4 S13006	82														
162534	ATU024 474	ATL8C3 5364:4 979..5 142	gap2	ATCEA4 S17981	82														
162535	ATU024 475	ATL8C3 2346:1 221..1 157	gap2	ATCEA4 C691_1	82														
162536	ATU024 476	ATL8C2 0746:7 294..6 938	gap2	ATCEA4 S11406	82														

[illegible]

[illegible][illegible]

10

162624	ATU024 564	ATL8C4 8989:1 169..9 74	gap2	ATCEA4 S32189	82															
162625	ATU024 565	ATL8C4 905:13 97..16 21	gap2	ATCEA4 S11817	82															
162626	ATU024 566	ATL8C4 908:52 3..423	gap2	ATCEA4 C78762 1	82															
162627	ATU024 567	ATL8C4 5101:3 63..57 8	gap2	ATCEA4 S11628	82															
162628	ATU024 568	ATL8C4 9317:1 949..1 679	gap2	ATCEA4 S4478	82															
162629	ATU024 569	ATL8C2 8649:4 50..1	gap2	ATCEA4 S1594	82															
162630	ATU024 570	ATL8C2 2408:3 240..3 104	gap2	ATCEA4 S30567	82															
162631	ATU024 571	ATL8C4 5118:9 29..78 2	gap2	ATCEA4 S29643	82															
162632	ATU024 572	ATL8C4 9386:9 07..13 62	gap2	ATCEA4 S18398	82															
162633	ATU024 573	ATL8C1 591:15 19..11 50	gap2	ATCEA4 S12319	82															
162634	ATU024 574	ATL8C4 9474:7	gap2	ATCEA4 S17624	82															

[illegible]

[illegible]

162713	ATU024 653	ATL8C1 9385:7 39..57 7	gap2	ATCEA4 S4360	82															
162714	ATU024 654	ATL8S2 357:14 4..1	gap2	ATCEA4 C29075 2	82															
162715	ATU024 655	ATL8C1 9400:2 61..64 6	gap2	ATCEA4 S12925	82															
162716	ATU024 656	ATL8C4 1002:5 53..25 4	gap2	ATCEA4 S11406	82															
162717	ATU024 657	ATL8S2 2465:4 59..22 1	gap2	ATCEA4 S1933	82															
162718	ATU024 658	ATL8S1 3811:1 ..543	gap2	ATCEA4 C233_2	82															
162719	ATU024 659	ATL8C1 363:28 27..24 52	gap2	ATCEA4 S12319	82															
162720	ATU024 660	ATL8S1 411:5 00..23 9	gap2	ATCEA4 S4478	82															
162721	ATU024 661	ATL8S1 415:82 ..1	gap2	ATCEA4 S17496	82															
162722	ATU024 662	ATL8S1 4252:5 04..36 9	gap2	ATCEA4 S14662	82															
162723	ATU024 663	ATL8S1 4352:1 ..251	gap2	ATCEA4 S8243	82															

162753	ATU024 693	ATL8C7 771:21 52..13 05	nap					ATL8C7 771:21 52..13 70	1.00	g48862 86	100	821	7.4e- 63	[Arabi dopsis thalia na] (AL050 300) putati ve protei n [Arabi dopsis thalia na]
162754	ATU024 694	ATL8C3 5131:9 95..85	nap					ATL8C3 5131:9 95..49 9	0.99	g35488 01	100	461	2.1e- 40	(AC005 313) putati ve transm embran e protei n [Arabi dopsis thalia na]
162755	ATU024 695	ATL8C5 353:17 51..30 00	nap					ATL8C5 353:17 51..26 99	0.99	g32016 32	100	846	2.8e- 91	(AC004 669) putati ve 2A6 protei n [Arabi dopsis thalia na]
162756	ATU024 696	ATL8C9 788:22 8..115	nap					ATL8C9 788:22 8..115	0.99	g25831 18	100	449	5.7e- 45	(AC002 387) hypoth

		4						4							etical protei n [Arabi dopsis thalia na]
162757	ATU024 697	ATL8C1 0848:1 1..791	nap					ATL8C1 0848:1 01..79 1	0.99	g39414 46	100	1015	7.0e- 75	(AF062 877) putati ve transc riptio n factor [Arabi dopsis thalia na]	
162758	ATU024 698	ATL8C5 865:14 87..39 63	nap					ATL8C5 865:14 87..39 56	0.99	g42622 10	100	1769		(AC006 161) simila r to leucin e zipper transc riptio n factor [Arabi dopsis thalia na]	
162759	ATU024 699	ATL8C1 0750:6 16..20 76	nap					ATL8C1 0750:6 16..20 76	0.99	g39414 66	100	769	1.6e- 61	(AF062 887) putati ve transc riptio	

162760	ATU024 700	ATL8C1 9854:2 261..4 43	nap					ATL8C1 9854:2 162..4 91	0.99	g45672 96	100	2401	3.3e- 224	n factor [Arabi dopsis thalia na] (AC006 918) putati ve Athila retroe lement ORF1 protei n [Arabi dopsis thalia na]
162761	ATU024 701	ATL8C8 434:32 13..22 01	nap					ATL8C8 434:32 13..22 01	0.98	g43357 45	100	919	1.8e- 91	(AC006 284) putati ve hydrol ase (conta ins an estera se/lip ase/th ioeste rase active site serine domain (prosi te: PS5018

162762	ATU024 702	ATL8C3 1052:3 72..14 77	nap						ATL8C3 1052:3 72..13 06	0.98	g48039 41	100	612	1.1e- 57	7) [Arabi dopsis thalia na] (AC006 264) putati ve major intrin sic protei n (nodul in-26 protei n) [Arabi dopsis thalia na]
162763	ATU024 703	ATL8C1 0776:3 045..1 886	nap						ATL8C1 0776:3 032..1 901	0.98	g11139 41	100	944	1.4e- 91	(U4071 3) Pv42p [Phase, olus vulgar is]
162764	ATU024 704	ATL8C3 2064:1 056..1 15	nap						ATL8C3 2064:1 056..1 15	0.98	g45824 64	100	1497	5.7e- 146	(AC007 071) hypoth etical protei n [Arabi dopsis thalia na]
162765	ATU024	ATL8C5	nap						ATL8C5	0.98	g19316	100	940	5.5e-	(U9597

705	492:47 47..14 23						492:47 47..21 46	55				72	3) recept or- kinase isolog [Arabi dopsis thalia na]
162766	ATU024 706	ATL8C3 0643:5 786..3 884	nap				ATL8C3 0643:5 702..3 884	0.98	g45809 90	100	1241	7.3e- 126	(AF120 335) putati ve transp osase [Arabi dopsis thalia na]
162767	ATU024 707	ATL8C1 5315:1 044..1 682	nap				ATL8C1 5315:1 306..1 501	0.98	g40380 66	100	720	1.1e- 53	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
162768	ATU024 708	ATL8C1 3914:1 797..8 62	nap				ATL8C1 3914:1 797..8 62	0.98	g25831 18	100	719	3.0e- 70	(AC002 387) hypoth etical protei n [Arabi dopsis thalia na]
162769	ATU024	ATL8C1	nap				ATL8C1	0.97	g40380	100	101	0.011	(AC005

162770	709	7793:3 11..10 81					7793:3 60..72 5	0.97	g47739 11	100	1160	6.3e- 114	897) hypoth etical protein [Arabi dopsis thalia na]
	ATU024 710	ATL8C4 6980:8 533..7 517	nap				ATL8C4 6980:8 533..7 517	0.97					(AF147 259) No defini tion line found [Arabi dopsis thalia na]
162771	ATU024 711	ATL8C4 4410:1 473..7	nap				ATL8C4 4410:1 473..7	0.97	g45860 70	100	1113	2.7e- 75	(AC006 194) putati ve transc riptio n factor [Arabi dopsis thalia na]
162772	ATU024 712	ATL8C1 0479:9 87..16 04	nap				ATL8C1 0479:1 549..1 033	0.97	g45444 33	100	151		(AC006 955) hypoth etical protein [Arabi dopsis na]

162773	ATU024 713	ATL8C7 735:51 3..112 8	nap					ATL8C7 735:56 7..112 8	0.97	g39414 60	100	997	1.4e- 87	thalia nal (AF062 884) putati ve transc riptio n factor [Arabi dopsis thalia nal]
162774	ATU024 714	ATL8C1 2065:9 454..6 830	nap					ATL8C1 2065:9 454..6 830	0.97	g15132 28	100	2161	1.3e- 214	(U6630 7) myo- inosit ol 1- phosph ate syntha se [Brass ica napus]
162775	ATU024 715	ATL8C4 9639:2 374..1 080	nap					ATL8C4 9639:1 882..1 080	0.97	g32693 01	100	868	2.0e- 93	(AL030 978) putati ve protei n [Arabi dopsis thalia nal]
162776	ATU024 716	ATL8C2 7009:2 226..1 231	nap					ATL8C2 7009:2 226..1 231	0.97	g41543 52	100	325	8.2e- 36	(AF110 333) PrMC3 [Pinus]

162777	ATU024 717	ATL8C3 1872:3 731..1 083	nap				ATL8C3 1872:3 513..1 697	0.97	g23427 33	100	1176	7.6e- 115	radiat aj (AC002 341) hypoth etical protei n [Arabi dopsis thalia na]
162778	ATU024 718	ATL8C2 4079:4 51..16 97	nap				ATL8C2 4079:4 51..16 97	0.97	g34510 78	100	992	1.4e- 80	(AL031 326) putati ve protei n [Arabi dopsis thalia na]
162779	ATU024 719	ATL8C3 7505:1 48..20 55	nap				ATL8C3 7505:1 48..20 55	0.97	g45389 64	100	514		(AL049 488) NAM/NA P like protei n [Arabi dopsis thalia na]
162780	ATU024 720	ATL8C4 7481:1 72..31 32	nap				ATL8C4 7481:1 554..3 132	0.97	g11689 40	100	522	2.3e- 33	CHORIS MATE MUTASE PRECUR SOR (CM-1) [Arabi dopsis

162781	ATU024 721	ATL8C4 7439:4 300..6 881	nap					ATL8C4 7439:4 300..6 881	0.96	g42622 13	100	925	6.7e- 88	thalia nal (AC006 161) hypoth etical protei n [Arabi dopsis thalia nal]
162782	ATU024 722	ATL8C3 5731:2 075..4 367	nap					ATL8C3 5731:2 223..4 367	0.96	g11935 1	100	1292	3.0e- 136	ENOLAS E (2- PHOSPH OGLYCE RATE DEHYDR ATASE) (2- PHOSPH O-D- GLYCER ATE HYDRO- LYASE) [Droso phila melano gaster J]
162783	ATU024 723	ATL8C2 5006:1 794..1 53	nap					ATL8C2 5006:1 794..5 32	0.96	g41917 95	100	673	1.9e- 71	(AC005 917) putati ve zinc finger -like protei n

162784	ATU024 724	ATL8C3 6236:3 58..15 71	nap							ATL8C3 6236:7 29..15 71	0.96	g49144 01	100	894	3.5e- 88	[Arabi dopsis thalia na] (AL050 352) hypoth etical protei n [Arabi dopsis thalia na]
162785	ATU024 725	ATL8C2 5843:1 868..4 8	nap							ATL8C2 5843:1 868..4 8	0.96	g43888 26	100	942	1.2e- 94	(AC006 528) hypoth etical protei n [Arabi dopsis thalia na]
162786	ATU024 726	ATL8C1 7705:1 ..3167 8	nap							ATL8C1 7705:1 929..3 088	0.96	g45860 69, g10916 78	100, 46	541, 205	1.7e- 55, 2.3e- 24	(AC006 194) hypoth etical protei n [Arabi dopsis thalia na]; activa tor- like transp osable elemen

162787	ATU024 727	ATL8C4 8697:2 289..5 87	nap					ATL8C4 8697:2 223..5 87	0.96	g31691 78	100	1990	1.6e- 194	(AC004 401) hypoth etical protein [Arabi dopsis thalia na]
162788	ATU024 728	ATL8C4 0955:1 224..6 9	nap					ATL8C4 0955:1 224..3 05	0.95	g19463 60	100	454	1.8e- 40	(U9321 5) elicit or respon se elemen t bindin g protein WRKY3 isolog [Arabi dopsis thalia na]
162789	ATU024 729	ATL8C4 2074:4 50..16 81	nap					ATL8C4 2074:4 50..15 40	0.95	g40380 66	100	501	7.5e- 27	(AC005 897) hypoth etical protein [Arabi

162790	ATU024 730	ATL8C3 4164:1 12..14 08	nap						ATL8C3 4164:2 41..14 08	0.95	g33675 27	100	1571	5.9e- 157	dopsis thalia na] (AC004 392) Strong simila rity to [Arabi dopsis thalia na]
162791	ATU024 731	ATL8C2 0716:2 651..3 62	nap						ATL8C2 0716:2 651..4 29	0.95	g21606 94	100	1668	4.7e- 167	(U7352 8) B' regula tory subuni t of PP2A [Arabi dopsis thalia na]
162792	ATU024 732	ATL8C1 2741:1 50..13 21	nap						ATL8C1 2741:1 50..13 21	0.95	g48862 80	100	527	5.6e- 45	(AL050 300) putati ve protei n [Arabi dopsis thalia na]
162793	ATU024 733	ATL8C3 4375:9 054..5 519	nap						ATL8C3 4375:9 054..5 519	0.94	g13816 76	100	686	2.8e- 67	(U5885 3) small GTP- bindin g

162794	ATU024 734	ATL8C4 50:453 6..609 0	nap						ATL8C4 50:454 2..609 0	0.94		g45394 50	100	851	3.9e- 86	protein [Glyci ne max] (AL049 500) putati ve protein [Arabi dopsis thalia na]
162795	ATU024 735	ATL8C2 6395:6 8..107 0	nap						ATL8C2 6395:8 0..104 2	0.94		g42638 18	100	490	1.5e- 51	(AC006 067) unknow n protein [Arabi dopsis thalia na]
162796	ATU024 736	ATL8C3 7492:1 122..1 877	nap						ATL8C3 7492:1 128..1 877	0.94		g22448 19	100	759		(Z9733 6) germin type 2 [Arabi dopsis thalia na]
162797	ATU024 737	ATL8C2 0726:3 163..1 1	nap						ATL8C2 0726:2 501..1 1	0.94		g22528 31	100	1502	9.9e- 150	(AF013 293) No defini tion line found

162798	ATU024 738	ATL8C3 5849:2 749..1 108	nap					ATL8C3 5849:1 752..1 108	0.94	g30803 58	100	823	6.8e- 87	[Arabi dopsis thalia na] (AL022 580) hypothe- tical protein [Arabi dopsis thalia na]
162799	ATU024 739	ATL8C1 0297:9 27..54 88	nap					ATL8C1 0297:1 510..9 97, ATL8C1 0297:2 100..5 488	0.94, 0.82	g47739 11, g38057 59	100, 99	1125, 116		(AF147 259) No definition line found [Arabi dopsis thalia na]; (AC005 693) hypothe- tical protein [Arabi dopsis thalia na]
162800	ATU024 740	ATL8C4 3426:2 027..8 42	nap					ATL8C4 3426:1 746..8 42	0.93	g49144 59	100	613		(AL050 400) hypothe- tical protein

162801	ATU024 741	ATL8C2 4856:7 7..335 8	nap					ATL8C2 4856:7 7..317 9	0.93	g40380 66	100	790	3.5e- 50	n [Arabi dopsis thalia na] (AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
162802	ATU024 742	ATL8C7 931:27 69..11 05	nap					ATL8C7 931:27 69..11 05	0.93	g27656 67	100	962	8.8e- 86	(Z8331 2) 3'(2') ,5'- bispho sphate nucleo tidase [Arabi dopsis thalia na]
162803	ATU024 743	ATL8C4 5821:2 077..7 53	nap					ATL8C4 5821:1 902..7 97	0.93	g49143 58	100	509	1.1e- 55	(AC007 289) hypoth etical protei n [Arabi dopsis thalia na]
162804	ATU024 744	ATL8C2 2908:2 079..2	nap					ATL8C2 2908:1 842..3	0.93	g46783 47	100	556	3.3e- 51	(AL049 659) putati

162805	ATU024 745	72	nap				06	0.93	g40380 66	100	692	2.2e- 48	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
	ATL8C4 2975:2 420..1 693						ATL8C4 2975:2 151..1 872						
162806	ATU024 746		nap				ATL8C2 2998:1 778..1 128	0.93	g48862 86	100	679	2.2e- 50	(AL050 300) putati ve protei n [Arabi dopsis thalia na]
	ATL8C2 2998:1 827..1 111												
162807	ATU024 747		nap				ATL8C1 431:40 9..872	0.93	g40068 21	100	470	3.6e- 52	(AC005 970) hypoth etical protei n [Arabi dopsis thalia na]
	ATL8C1 431:34 4..130 6												
162808	ATU024 748		nap				ATL8C2 5182:1 018..1	0.93	g13510 14	100	857	2.7e- 85	40S RIBOSO MAL
	ATL8C2 5182:1 018..1												

162809	ATU024 749	929	nap				756	0.93	936872 46	100	1306	1.1e- 115	PROTEI N S8 [Oryza sativa]
		ATL8C3 5029:1 054..4 229					ATL8C3 5029:1 054..4 182						(AC005 169) putati ve suppre ssor protei n [Arabi dopsis thalia na]
162810	ATU024 750	ATL8C2 0052:2 4..103 7	nap				ATL8C2 0052:1 21..10 37	0.93	944681 13	100	293		(Y1836 7) 3- alpha- hydrox yestero id dehydr ogenas e-like protei n [Branc hiosto ma florid ae]
162811	ATU024 751	ATL8C1 3107:1 861..5 218	nap				ATL8C1 3107:1 861..5 218	0.93	944907 02	100	2204	3.4e- 216	(AL035 680) hypoth etical protei n [Arabi

162812	ATU024 752	ATL8C2 3344:2 221..8 46	nap						ATL8C2 3344:2 221..8 46	0.93	g42630 50	100	446	5.0e- 45	(AC005 142) putati ve noduli n [Arabi dopsis thalia na]
162813	ATU024 753	ATL8C3 4943:4 4..123 5	nap						ATL8C3 4943:4 4..123 5	0.93	g32528 10	100	900	7.2e- 79	(AC004 705) hypoth etical protei n [Arabi dopsis thalia na]
162814	ATU024 754	ATL8C2 5808:3 93..23 20	nap						ATL8C2 5808:3 93..22 21	0.93	g45196 73	100	1134	1.3e- 91	(AB017 694) WREBP- 2 [Nicot iana tabacu m]
162815	ATU024 755	ATL8C1 4472:6 45..45 03	nap						ATL8C1 4472:3 042..4 503	0.92	g34137 10	100	926	7.0e- 98	(AC004 747) hypoth etical protei n [Arabi dopsis thalia na]

162816	ATU024 756	ATL8C1 0176:5 480..4 471	nap				ATL8C1 0176:5 480..4 471	0.92	g43097 03	100	1149		na] (AC006 266) putati ve transp oson protei n [Arabi dopsis thalia na]
162817	ATU024 757	ATL8C2 9972:1 088..2 021	nap				ATL8C2 9972:1 088..2 021	0.92	g45585 67	100	879	4.8e- 88	(AC007 138) hypoth etical protei n [Arabi dopsis thalia na]
162818	ATU024 758	ATL8C9 369:82 5..330 2	nap				ATL8C9 369:82 5..330 2	0.92	g42622 10	100	1852	3.6e- 176	(AC006 161) simila r to leucin e zipper transc riptio n factor [Arabi dopsis thalia na]
162819	ATU024 759	ATL8C4 4075:3	nap				ATL8C4 4075:3	0.92	g11105 02	100	519	1.4e- 43	(U4038 7)

162822	ATU024 762	ATL8C3 6325:3 63..29 46	nap					ATL8C3 6325:3 63..29 46	0.92	g28334 60	100	488	3.7e- 41	[Arabi dopsis thalia na]
162823	ATU024 763	ATL8C2 1148:4 264..3 018	nap					ATL8C2 1148:4 264..3 021	0.92	g43097 03	100	1168	6.2e- 104	(AC006 266) putati ve transp oson protei n [Arabi dopsis thalia na]
162824	ATU024 764	ATL8C4 6216:8 33..16 2	nap					ATL8C4 6216:7 84..34 2	0.92	g40380 66	100	701	2.5e- 44	(AC005 897) hypothe tical protei n [Arabi dopsis thalia na]
162825	ATU024 765	ATL8C4 7570:3 081..1 004	nap					ATL8C4 7570:1 380..1 004,	0.92, 0.85	g30753 93	100	626	2.5e- 43	(AC004 484) hypothe tical

162826	ATU024 766	ATL8C1 270:29 02..46 26	nap					0.92	g47339 67	100	825	5.9e- 62	protei n [Arabi dopsis thalia na]
													(AC007 261) envelo pe- like protie n [Arabi dopsis thalia na]
162827	ATU024 767	ATL8C1 6059:9 33..29 88	nap					0.92	g22448 83, g23885 68	100, 34	711, 139	2.2e- 71, 1.6e- 09	(Z9733 8) simila rity to CONSTA NS protei n - Arabid opsis thalia na [I; (AC000 098) YUP8H1 2.10 [Arabi dopsis thalia na]
162828	ATU024 768	ATL8C8 479:81	nap					0.91	g47339 82	100	1199	3.2e- 102	(AC007 268)

		..1305						..1305							hypothetical protein [Arabidopsis thaliana]
162829	ATU024769	ATL8C12624:460..3115	nap					ATL8C12624:460..1739, ATL8C12624:2035..3115	0.91, 0.48	g4646226	100	1236	9.9e-118	(AC007235) hypothetical protein [Arabidopsis thaliana]	
162830	ATU024770	ATL8C20703:71..1078	nap					ATL8C20703:296..1078	0.91	g4733976	100	1071	1.4e-69	(AC007264) hypothetical protein [Arabidopsis thaliana]	
162831	ATU024771	ATL8C42182:1839..856	nap					ATL8C42182:1839..856	0.91	g3411152	100	634	1.9e-65	(AF066050) thymidine kinase [Oryza sativa]	
162832	ATU024772	ATL8C8924:929..2110	nap					ATL8C8924:929..2110	0.91	g2827082	100	1288	2.8e-132	(AF020272) malate dehydr	

162833	ATU024 773	ATL8C6 433:26 70..53 6	nap						ATL8C6 433:24 25..53 6	0.91		g38057 58	100	1287	1.3e- 66	(AC005 693) putati ve gag- protea se polypr otein [Arabi dopsis thalia nal]
162834	ATU024 774	ATL8C4 3613:6 44..19 86	nap						ATL8C4 3613:6 44..19 40	0.91		g22447 38, g68842 0	100, 99	675, 104		(D8841 6) endo- 1,3- beta- glucan ase [Gossy pium hirsut um]; (D2645 2) tumor- relate d protei n [Nicot iana glauca

776	310:28 8..101 4					310:33 7..836		66				26	897) hypothe- tical protein [Arabi- dopsis thaliana]
162837	ATU024 777	ATL8C5 785:13 8..108 6	nap			ATL8C5 785:56 5..108 6	0.90	g45586 87	100	935			(AC006 586) hypothe- tical protein [Arabi- dopsis thaliana]
162838	ATU024 778	ATL8C4 6217:6 820..3 56	nap			ATL8C4 6217:3 134..3 56, ATL8C4 6217:6 425..3 762	0.90, 0.76	g10762 74	100	1190	8.0e- 124		cucumi- sin (EC 3.4.21 .25) precu- sor - muske- lon (fragm- ent) []
162839	ATU024 779	ATL8C5 0143:2 173..8 7	nap			ATL8C5 0143:2 173..8 7	0.90	g45811 43	100	549	1.7e- 56		(AC006 919) hypothe- tical protein [Arabi- dopsis thaliana]

162840	ATU024 780	ATL8C1 3442:3 974..2 919	nap				ATL8C1 3442:3 974..3 262	0.90	g44552 97	100	677	2.2e- 71	na] (AL035 528) hypoth etical protei n [Arabi dopsis thalia na]
162841	ATU024 781	ATL8C3 5991:2 954..7 36	nap				ATL8C3 5991:2 954..7 36	0.90	g45809 90	100	1686	6.7e- 170	(AF120 335) putati ve transp osase [Arabi dopsis thalia na]
162842	ATU024 782	ATL8C4 98:785 7..633 9	nap				ATL8C4 98:779 1..633 9	0.90	g46783 47	100	1784	7.6e- 184	(AL049 659) putati ve protei n [Arabi dopsis thalia na]
162843	ATU024 783	ATL8C1 4345:5 537..4 554	nap				ATL8C1 4345:5 530..4 554	0.90	g48352 43	100	690	2.9e- 48	(AL049 862) putati ve protei n [Arabi dopsis thalia

162844	ATU024 784	ATL8C4 0985:1 19..11 76	nap				ATL8C4 0985:1 19..10 48	0.90	g40380 66	100	552	4.6e- 41	na] (AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
162845	ATU024 785	ATL8C2 1264:2 174..4 297	nap				ATL8C2 1264:2 174..4 258	0.90	g48357 67	100	519	1.7e- 48	(AC007 202) T8K14. 16 [Arabi dopsis thalia na]
162846	ATU024 786	ATL8C4 6028:4 435..2 071	nap				ATL8C4 6028:4 435..2 071	0.89	g24987 31	100	1618	5.6e- 160	PROBAB LE NADP- DEPEND ENT OXIDOR EDUCTA SE P1 [Arabi dopsis thalia na]
162847	ATU024 787	ATL8C1 4458:7 513..9 883	nap				ATL8C1 4458:7 513..9 579	0.89	g40380 66, g42622 10	100, 57	822, 1099	2.1e- 34, 6.9e- 112	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]

162848	ATU024 788	ATL8C1 5871:1 68..18 19	nap						0.89	g36000 30	100	864	1.2e- 83	na]; (AC006 161) simila r to leucin e zipper transc riptio n factor [Arabi dopsis thalia na]
162849	ATU024	ATL8C1	nap						ATL8C1	g13284	100	1045	9.0e-	na]; (AF080 119) contai ns simila rity to ankyri n repeat s (Pfam: ank.hm m, score: 13.93, 14.93 and 27.78) [Arabi dopsis thalia na]

	789	6341:4 63..14 04						6341:4 63..14 04		9				98	RIBOSO MAL PROTEI N L2 [Nicot iana tabacu m]
162850	ATU024 790	ATL8C3 2133:5 74..23 59	nap					ATL8C3 2133:5 74..23 59	0.89	g19030 34	100	2251	6.0e- 206	(X9462 5) amp- bindin g protei n [Brass ica napus]	
162851	ATU024 791	ATL8C7 587:21 66..38 39	nap					ATL8C7 587:21 66..38 39	0.89	g27645 74	100	691	1.6e- 68	(AJ001 009) pore protei n of 24 kD (OEP24) [Pisum sativu m]	
162852	ATU024 792	ATL8C1 7125:1 869..3 41	nap					ATL8C1 7125:1 869..3 51	0.89	g44552 03	100	996	2.7e- 102	(AL035 440) putati ve protei n [Arabi dopsis thalia na]	
162853	ATU024	ATL8C1	nap					ATL8C1	0.89	g31526	100	3585	0.0	(AC004	

793	1187:8 786..3 908				1187:8 786..3 915	0.89	g23469 72	100	354	3.4e- 28	482) hypoth etical protein [Arabi dopsis thalia na]
162854	ATU024 794	ATL8C1 1541:9 81..10 2	nap		ATL8C1 1541:9 23..10 2	0.89	g23469 72	100	354	3.4e- 28	(AB006 598) ZPT2- 11 [Petun ia x hybrid a]
162855	ATU024 795	ATL8C1 9832:9 23..21 66	nap		ATL8C1 9832:9 23..21 66	0.89	g68272 8	100	750	2.3e- 75	(L4003 1) S- adenos yl-L- methio nine:t rans- caffeoyl- Coenzy me A 3-O- methyl transf erase [Arabi dopsis thalia na]
162856	ATU024 796	ATL8C4 4406:2 1..125 3	nap		ATL8C4 4406:2 1..943	0.89	g44173 05	100	1464	1.2e- 138	(AC006 446) hypoth etical

162857	ATU024 797	ATL8C1 2166:4 910..2 703	nap					ATL8C1 2166:4 910..2 703	0.89		g42622 13	100	592	1.6e- 53	protein [Arabi dopsis thalia na]
162858	ATU024 798	ATL8C1 6009:2 402..5 522	nap					ATL8C1 6009:2 402..5 522	0.88		g30636 94	100	724	2.8e- 67	(AL022 537) putati ve protei n [Arabi dopsis thalia na]
162859	ATU024 799	ATL8C3 306:18 31..42 60	nap					ATL8C3 306:18 31..42 60	0.88		g36953 97	100	1846	1.5e- 174	(AF096 372) No defini tion line found [Arabi dopsis thalia na]
162860	ATU024 800	ATL8C3 3787:1 0..241	nap					ATL8C3 3787:1 0..238	0.88		g29807 61	100	655	4.6e- 45	(AL022 198) putati

162861	ATU024 801	ATL8C3 1696:6 6..753	nap							7								ve protei n [Arabi dopsis thalia na]
										ATL8C3 1696:8 3..753	0.88						1.9e- 10	Micron eme antige n - Sarcoc ystis muris [Sarco cystis muris]
162862	ATU024 802	ATL8C1 731:75 ..4021	nap							ATL8C1 731:75 ..3891	0.88						5.3e- 151, 1.7e- 26	(AF096 372) No defini tion line found [Arabi dopsis thalia na]; (AC006 446) putati ve pol ypr otei n with a revers e transc riptase

162863	ATU024 803	ATL8C2 0567:1 000..5 041	nap						0.88	g32427 11	100	2969	4.4e- 224	domain [Arabi dopsis thalia na] (AC003 040) hypoth etical protei n [Arabi dopsis thalia na]
162864	ATU024 804	ATL8C3 46:511 5..329 8	nap						0.88	g32928 33	100	790	3.7e- 59	(AL031 018) putati ve membra ne protei n [Arabi dopsis thalia na]
162865	ATU024 805	ATL8C1 4515:3 849..1 2	nap						0.88	g43253 51	100	3592	0.0	(AF128 394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei

162866	ATU024 806	ATL8C4 9898:9 689..8 166	nap						0.87	g40380 66	100	752	8.5e- 50	n (GB:X5 7297) [Arabi dopsis thalia na]
162867	ATU024 807	ATL8C1 2816:1 833..7 8	nap						0.87	g31579 42	100	232	1.5e- 27	(AC002 131) Simila r to style develo pment- specif ic protei n 9612 precu sor gb X55 193 and pectat e lyase P59 precu sor gb X15

162868	ATU024 808	ATL8C4 7427:5 46..33 82	nap						ATL8C4 7427:5 46..33 82	0.87	g36458 98	100	2567	9.4e- 243	(U6840 8) in- frame stop codon; possib ly a post- transp ositio n mutati on [Zea mays]	499 from Lycopé rsicon escole ntum. [Arabi dopsis thalia na]
162869	ATU024 809	ATL8C8 57:310 7..113	nap						ATL8C8 57:310 7..113	0.87	g34027 13	100	349	4.2e- 26	(AC004 261) hypoth etical protei n [Arabi dopsis thalia na]	(AC004 261) hypoth etical protei n [Arabi dopsis thalia na]
162870	ATU024 810	ATL8C1 5904:2 588..1 299	nap						ATL8C1 5904:2 247..1 299	0.87	g28424 90	100	934	1.1e- 87	(AL021 749) heat- shock protei	(AL021 749) heat- shock protei

162871	ATU024 811	ATL8C9 867:99 18..74 85	nap					ATL8C9 867:98 88..74 85	0.87	g40493 41	100	528	7.5e- 37	n [Arabi dopsis thalia nal] (AL034 567) putati ve protei n [Arabi dopsis thalia nal]
162872	ATU024 812	ATL8C4 1407:3 17..21 22	nap					ATL8C4 1407:3 17..19 14	0.87	g47340 01	100	841	2.0e- 84	(AC007 187) hypoth etical protei n [Arabi dopsis thalia nal]
162873	ATU024 813	ATL8C1 274:19 31..93 6	nap					ATL8C1 274:18 87..12 60	0.86	g47739 11	100.	649	4.4e- 66	(AF147 259) No defini tion line found [Arabi dopsis thalia nal]
162874	ATU024 814	ATL8C2 3313:2 964..3 89	nap					ATL8C2 3313:2 955..3 89	0.86	g22448 31	100	999	1.4e- 70	(Z9733 7) hypoth etical

162875	ATU024 815	ATL8C2 5155:2 336..1 261	nap						ATL8C2 5155:2 336..1 276	0.86	g32491 07	100	889	3.3e- 83	protein [Arabi dopsis thalia na] (AC003 114) Contai ns simi larity to phlo em - specif ic lect in PP2 gb Z17 331 from Cucubi ta maxima [Arabi dopsis thalia na]
162876	ATU024 816	ATL8C4 0719:4 1..111 3	nap						ATL8C4 0719:4 1..111 3	0.86	g42621 75	100	883	5.9e- 92	(AC005 508) 12894 [Arabi dopsis thalia na]
162877	ATU024 817	ATL8C5 893:36 62..13	nap						ATL8C5 893:36 62..13	0.86	g40068 24	100	1847		(AC005 970) hypo

162878	ATU024 818	31	ATL8C4 4061:4 86..18 60	nap						ATL8C4 4061:4 86..18 60	0.86	g38106 01	100	1193	9.4e- 111	etical protei n [Arabi dopsis thalia na] (AC005 398) hypoth etical protei n [Arabi dopsis thalia na]
162879	ATU024 819	ATL8C1 4362:8 657..5 191	nap							ATL8C1 4362:8 116..5 433	0.86	g45876 83	100	2675	3.le- 197	(AC007 197) hypoth etical protei n [Arabi dopsis thalia na]
162880	ATU024 820	ATL8C1 8325:1 782..5 232	nap							ATL8C1 8325:1 938..5 186	0.86	g48951 83	100	2304	6.5e- 213	(AC007 661) hypoth etical protei n [Arabi dopsis thalia na]
162881	ATU024 821	ATL8C1 609:18 01..10	nap							ATL8C1 609:18 01..10	0.86	g45389 93	100	613	6.5e- 56	(AL049 481) putati

162882	ATU024 822	ATL8C4 3897:2 849..9 22	nap					ATL8C4 3897:2 849..9 22	0.86	g38105 93	100	2160		ve host respon se protei n [Arabi dopsis thalia na]
162883	ATU024 823	ATL8C9 272:29 86..28 2	nap					ATL8C9 272:21 85..29 0	0.86	g42638 30	100	2196		(AC006 067) hypoth etical protei n [Arabi dopsis thalia na]
162884	ATU024 824	ATL8C1 6424:2 53..33 96	nap					ATL8C1 6424:2 53..30 03	0.86	g47739 11, g38057 59, g45593 61	100, 99, 99	755, 179, 536	4.3e- 67, 2.5e- 06, 7.6e- 45	(AF147 259) No defini tion line found

162885	ATU024 825	ATL8C2 3846:3 763..5 26	nap							0.86	g43888 21	100	1676	2.2e- 178	[Arabi dopsis thalia na]; (AC005 693) hypoth etical protei n [Arabi dopsis thalia na]; (AC006 585) hypoth etical protei n [Arabi dopsis thalia na]
162886	ATU024 826	ATL8C2 7245:2 381..9	nap							0.86	g48357 67	100	735	2.9e- 76	(AC007 202) T8K14.

162887	ATU024 827	11 ATL8C9 641:20 7..227 7	nap							11 ATL8C9 641:20 7..203 3	0.86	g40380 66	100	119	0.95	16 [Arabi dopsis thalia na] (AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
162888	ATU024 828	ATL8C1 3438:4 11..44 70	nap							ATL8C1 3438:4 11..30 21, ATL8C1 3438:3 692..4 332	0.86, 0.84	g36500 36, g45444 33	100, 40	2527, 142	1.2e- 244, 0.0021	(AC005 396) putati ve transp osase [Arabi dopsis thalia na]; (AC006 955) hypoth etical protei n [Arabi dopsis thalia na]
162889	ATU024 829	ATL8C3 0589:1 493..3 63	nap							ATL8C3 0589:1 493..3 63	0.86	g41004 33	100	372	4.2e- 37	(AF000 378) beta- glucos idase

162890	ATU024 830	ATL8C2 4701:1 483..7 75	nap						ATL8C2 4701:1 483..7 75	0.86		g40564 94	100	657	7.3e- 61	[Glycine max] (AC005 896) putative protein translase [Arabidopsis thaliana]
162891	ATU024 831	ATL8C2 3768:1 004..2 912	nap						ATL8C2 3768:1 004..2 912	0.85		g45443 89	100	607	8.3e- 53	(AC007 047) putative homeodomain protein [Arabidopsis thaliana]
162892	ATU024 832	ATL8C4 4141:5 392..1 006	nap						ATL8C4 4141:5 061..1 053	0.85		g23427 33, g33865 34	100, 43	1993, 472	1.3e- 179, 2.5e- 43	(AC002 341) hypothetical protein [Arabidopsis thaliana]; (AF078 934) marine

162893	ATU024 833	ATL8C4 1805:2 83..21 02	nap					ATL8C4 1805:2 83..20 86	0.85	g46462 26	100	1346	6.5e- 115	r transp osase [Glyci ne max] (AC007 235) hypoth etical protei n [Arabi dopsis thalia na]
162894	ATU024 834	ATL8C3 0928:4 12..15 45	nap					ATL8C3 0928:4 12..14 26	0.85	g35823 21	100	1363	2.7e- 128	(AC005 496) hypoth etical protei n [Arabi dopsis thalia na]
162895	ATU024 835	ATL8C3 5:2064 ..197	nap					ATL8C3 5:2064 ..197	0.85	g45585 68	100	1576	2.4e- 164	(AC007 138) hypoth etical protei n [Arabi dopsis thalia na]
162896	ATU024 836	ATL8C4 1407:5 032..3 560	nap					ATL8C4 1407:4 776..3 560	0.85	g46462 24	100	1458	1.1e- 123	(AC007 295) hypoth etical

162897	ATU024 837	ATL8C4 9732:4 052..6 37	nap					ATL8C4 9732:3 958..6 37	0.85	g80769 8, g43357 46	100, 42	1235, 235	7.6e- 105, 7.4e- 21	protein [Arabi dopsis thalia na] (D3220 6) prepro - cucumi sin [Cucum is melo]; (AC006 284) hypoth etical protein [Arabi dopsis thalia na]
162898	ATU024 838	ATL8C4 9679:1 179..4 42	nap					ATL8C4 9679:1 179..4 42	0.85	g42043 07	100	1187	1.3e- 106	(AC003 027) lcl pr t_seq No defini tion line found [Arabi dopsis thalia na]
162899	ATU024 839	ATL8C2 9978:4	nap					ATL8C2 9978:4	0.85	g17551 62	100	569	8.8e- 50	(U7519 2)

162900	ATU024 840	ATL8C1 6899:4 ..4191	nap						269..3 438	269..3 496	0.84	g33778 36	100	2113	3.8e- 163	(AF075 598) contai ns simila rity to revers e transc riptas es [Arabi dopsis thalia na]
162901	ATU024 841	ATL8C1 586:55 25..20 76	nap						ATL8C1 586:54 52..20 76	0.84	g39534 58	100	1378	5.3e- 103	(AC002 328) F20N2. 3 [Arabi dopsis thalia na]	
162902	ATU024 842	ATL8C9 552:20 21..19 3	nap						ATL8C9 552:20 21..20 9	0.84	g46462 26	100	1335	9.9e- 123	(AC007 235) hypoth etical protei n [Arabi dopsis thalia na]	

162903	ATU024 843	ATL8C2 0631:2 96..35 52	nap					ATL8C2 0631:9 20..35 49	0.84	g10762 74	100	1192	3.4e- 87	thalia na] cucumi sin (EC 3.4.21 .25) precu sor - muskm elon (fragm ent) []
162904	ATU024 844	ATL8C1 617:64 97..13 551	nap					ATL8C1 617:64 97..12 720	0.84	g47339 86	100	2999	7.4e- 180	(AC007 209) hypoth etical protei n [Arabi dopsis thalia na]
162905	ATU024 845	ATL8C7 178:16 23..24 96	nap					ATL8C7 178:16 23..24 73	0.84	g45860 99	100	301	1.0e- 28	(AL049 638) putati ve protei n [Arabi dopsis thalia na]
162906	ATU024 846	ATL8C4 2515:5 28..24 98	nap					ATL8C4 2515:5 28..24 98	0.84	g37383 38	100	1763	6.9e- 185	(AC005 170) putati ve polyga lactur

162907	ATU024 847	ATL8C3 3946:4 131..7 364	nap						ATL8C3 3946:4 131..7 262	0.84	g45876 83	100	3066		onase [Arabi dopsis thalia na]
162908	ATU024 848	ATL8C3 3251:7 8..125 8	nap						ATL8C3 3251:2 59..12 58	0.84	g42638 23	100	656	4.1e- 70	(AC007 197) hypoth etical protei n [Arabi dopsis thalia na]
162909	ATU024 849	ATL8C8 232:11 88..24	nap						ATL8C8 232:46 4..24	0.84	g22448 61	100	540	1.1e- 41	(Z9733 7) cucumi sin [Arabi dopsis thalia na]
162910	ATU024 850	ATL8C1 9899:1 590..2 83	nap						ATL8C1 9899:1 590..1 045	0.84	g13635 28	100	1506	9.3e- 136	gag protei n - maize [Zea mays]
162911	ATU024	ATL8C8	nap						ATL8C8	0.84,	g44327	100,	906,	3.4e-	(AC006

162912	ATU024 852	ATL8C1 3616:3 05..29 00	nap					046:22 4..770 , ATL8C8 046:19 10..38 51	0.79	95, 944327 94	85	3804	51, 0.0	437) putati ve protei n 2 of of the En/Spm transp osable elemen t system of Zea mays [Arabi dopsis thalia na]; (AC006 437) putati ve Tnp2 Taml transp oson protei n [Arabi dopsis thalia na]
													6.5e- 88	(AC007 293) hypoth etical protei n [Arabi dopsis

162913	ATU024 853	ATL8C3 6325:3 920..6 179	nap					ATL8C3 6325:3 920..6 179	0.84	g25831 31	100	1067	2.0e- 119	thalia na] (AC002 387) putati ve pectin estera se [Arabi dopsis thalia na]
162914	ATU024 854	ATL8C7 229:54 ..2513	nap					ATL8C7 229:72 ..2510	0.84	g32928 29	100	1034	2.8e- 86	(AL031 018) putati ve protei n [Arabi dopsis thalia na]
162915	ATU024 855	ATL8C1 0334:2 403..1 371	nap					ATL8C1 0334:2 403..1 440	0.83	g36081 28	100	1012		(AC005 314) hypoth etical protei n [Arabi dopsis thalia na]
162916	ATU024 856	ATL8C1 6777:2 38..16 81	nap					ATL8C1 6777:2 38..16 72	0.83	g27393 73	100	937	5.5e- 100	(AC002 505) putati ve flavon ol 3- o-

162917	ATU024 857	ATL8C1 5299:3 614..4 34	nap						ATL8C1 5299:3 589..4 34	0.83	g41159 19	100	1749	1.2e- 174	glucosyltransferase [Arabi dopsis thaliana]
162918	ATU024 858	ATL8C1 4747:2 391..1 727	nap						ATL8C1 4747:2 342..1 771	0.83	g40380 66	100	740	1.7e- 23	(AF118222) similar to the subtilase family of serine proteases (Pfam: PF00082, score: 47.5, E=3.8e-12, n=2) [Arabi dopsis thaliana]
															(AC005897) hypothetical protein [Arabi dopsis thaliana]

162919	ATU024 859	ATL8C2 5585:3 177..1 656	nap				ATL8C2 5585:3 177..1 656	0.83	g45899 54	100	425	3.1e- 52	thalia na] (AC007 169) hypoht etical protei n [Arabi dopsis thalia na]
162920	ATU024 860	ATL8C2 9676:6 0..342 4	nap				ATL8C2 9676:6 0..342 4	0.83	g42638 30	100	2721	1.1e- 208	(AC006 067) hypoht etical protei n [Arabi dopsis thalia na]
162921	ATU024 861	ATL8C4 9616:7 6..392 0	nap				ATL8C4 9616:7 6..392 0	0.83	g18421 88	100	1223	8.0e- 128	(Y0849 9) mitoch ondria l phosph ate transl ocator [Betul a pendul a]
162922	ATU024 862	ATL8C4 073:26 24..57 9	nap				ATL8C4 073:12 53..57 9, ATL8C4	0.83, 0.58	g44067 91	100	879	2.1e- 69	(AC006 304) hypoht etical protei

162923	ATU024 863	ATL8C2 9959:1 718..7 70	nap					073:26 24..15 17	0.83	g45586 87	100	1077	1.7e- 89	n [Arabi dopsis thalia na] (AC006 586) hypoth etical protei n [Arabi dopsis thalia na]
162924	ATU024 864	ATL8C1 2010:3 016..2 149	nap					ATL8C1 2010:3 016..2 149	0.83	g37023 19	100	498	3.7e- 28	(AC005 397) hypoth etical protei n [Arabi dopsis thalia na]
162925	ATU024 865	ATL8C4 8414:8 88..49	nap					ATL8C4 8414:8 40..84	0.83	g30634 51	100	915	5.0e- 93	(AC003 981) F22013 .13 [Arabi dopsis thalia na]
162926	ATU024 866	ATL8C4 4239:1 985..4 712	nap					ATL8C4 4239:2 079..4 712	0.83	g80769 8	100	1226	6.6e- 105	(D3220 6) prepro - cucumi sin [Cucum

162927	ATU024 867	ATL8C3 4836:3 223..1 952	nap				ATL8C3 4836:3 223..1 952	0.83	g23472 07	100	1717	7.5e- 180	is melol (AC002 338) APG protei n isolog [Arabi dopsis thalia na]
162928	ATU024 868	ATL8C4 1663:1 220..3 23	nap				ATL8C4 1663:1 214..3 30	0.83	g35519 54	100	465	3.4e- 21	(AF082 030) senesc ence- associ ated protei n 5 [Hemer ocalli s hybrid cultiv ar]
162929	ATU024 869	ATL8C2 4774:2 63..18 87	nap				ATL8C2 4774:2 63..18 78	0.83	g45876 80	100	1628	1.1e- 150	(AC007 197) putati ve cytoch rome p450 [Arabi dopsis thalia na]
162930	ATU024 870	ATL8C3 0012:3 376..1	nap				ATL8C3 0012:3 376..2	0.82	g45585 62	100	2633	1.8e- 256	(AC007 138) putati

162938	ATU024 878	8	ATL8C3 4522:2 442..7 86	nap							ATL8C3 4522:2 374..9 70	0.82	g45443 99	100	1582	1.6e- 164	stop codon; possibly a post-transp osition mutation on [Zea mays]
162939	ATU024 879		ATL8C4 5778:5 614..1 0321	nap							ATL8C4 5778:5 614..1 0301	0.82	g40380 66, g47739 08	100, 44	738, 1773	1.7e- 39, 2.1e- 144	(AC005 897) hypoth etical protein [Arabi dopsis thalia nal]; (AF147 259) No defini tion

162940	ATU024 880	ATL8C4 2905:1 406..2 652	nap						ATL8C4 2905:1 541..2 651	0.81	g44902 96	100	905	1.1e- 100	line found [Arabi dopsis thalia na] (AL035 678) hypoth etical protei n [Arabi dopsis thalia na]
162941	ATU024 881	ATL8C2 3352:6 125..4 203	nap						ATL8C2 3352:6 125..4 203	0.81	g44067 95	100	959	3.0e- 74	(AC006 304) hypoth etical protei n [Arabi dopsis thalia na]
162942	ATU024 882	ATL8C3 4828:4 126..7 76	nap						ATL8C3 4828:4 126..7 96	0.81	g33414 17, g28276 39	100, 99	661, 121	9.3e- 54, 2.6e- 09	(AJ009 657) Mu3 subuni t of clathr in- associ ated protei n comple x AP-3 [Droso

162943	ATU024 883	ATL8C1 8577:1 406..3 999	nap					ATL8C1 8577:1 415..3 999	0.81	g48504 12	100	1862	7.9e- 166	phila melano gaster]; (AL021 636) hypoth etical protei n [Arabi dopsis thalia na]
162944	ATU024 884	ATL8C8 935:35 0..218 5	nap					ATL8C8 935:42 5..176 8	0.81	g34618 45	100	626	1.5e- 47	(AC005 315) hypoth etical protei n [Arabi dopsis thalia na]
162945	ATU024 885	ATL8C3 1007:2 394..2 0	nap					ATL8C3 1007:2 394..2 6	0.81	g48951 68	100	673	1.1e- 63	(AC007 662) putati ve

162946	ATU024 886	ATL8C2 4222:1 956..6 45	nap					ATL8C2 4222:1 711..6 45	0.81	g42622 13	100	924	8.5e- 98	replication protein [Arabidopsis thaliana]
162947	ATU024 887	ATL8C9 782:67 83..11 22	nap					ATL8C9 782:67 27..11 22	0.81	g46801 80, g46801 83	100, 50	2538, 930	4.3e- 262, 2.7e- 74	(AF111 709) polyprotein [Oryza sativa subsp. indica]; (AF111 709) gag-pol protein [Oryza sativa subsp. indica]
162948	ATU024 888	ATL8C3 7853:1	nap					ATL8C3 7853:1	0.80	g37383 26	100	389	2.2e- 36	(AC005 170)

162949	ATU024 889	29..92 3	ATL8C2 35:213 2..559 2	nap						29..92 3	0.80	g32427 13, g38057 59	100, 99	3416, 255	0.0, 7.9e- 17	(AC003 040) putati ve transp osase [Arabi dopsis thalia nal; (AC005 693) hypoth etical protei n [Arabi dopsis thalia nal]
162950	ATU024 890	29..92 3	ATL8C1 9948:2 046..1 63	nap						ATL8C1 9948:2 046..1 63	0.80	g36458 98	100	2412	6.2e- 223	(U6840 8) in- frame stop codon; possib ly a post- transp ositio n mutati

162951	ATU024 891	ATL8C4 6320:1 895..2 984	nap					ATL8C4 6320:2 490..2 984	0.80	g45875 91	100	412	1.9e- 42	on [Zea mays] (AC007 232) hypoth etical protei n [Arabi dopsis thalia na]
162952	ATU024 892	ATL8C3 1927:5 791..4 18	nap					ATL8C3 1927:2 051..4 18, ATL8C3 1927:5 791..3 021	0.80, 0.77	g22447 52	100	1021	2.8e- 83	(Z9733 5) hypoth etical protei n [Arabi dopsis thalia na]
162953	ATU024 893	ATL8C4 8538:5 3..361 1	nap					ATL8C4 8538:5 3..361 1	0.80	g47340 01	100	828	8.4e- 85	(AC007 187) hypoth etical protei n [Arabi dopsis thalia na]
162954	ATU024 894	ATL8C1 8243:7 573..6 661	nap					ATL8C1 8243:7 573..6 670	0.80	g42042 77	100	622	5.8e- 64	(AC004 146) Hypoth etical protei n [Arabi

162955	ATU024 895	ATL8C4 8583:2 35..15 63	nap						ATL8C4 8583:2 35..15 63	0.80	g27548 16	100	490	2.5e- 53	dopsis thalia na] (AF021 346) non- race specif ic. diseas e resist ance protei n [Arabi dopsis thalia na]
162956	ATU024 896	ATL8C5 878:55 ..854	nap						ATL8C5 878:55 ..686	0.80	g46782 06	100	322		(AC007 134) putati ve polyga lactur onase [Arabi dopsis thalia na]
162957	ATU024 897	ATL8C1 680:15 4..152 5	nap						ATL8C1 680:15 4..146 2	0.80	g44327 95	100	834	7.8e- 52	(AC006 437) putati ve protei n 2 of of the En/Spm transp osable

162958	ATU024 898	ATL8C3 5125:3 063..1 709	nap					ATL8C3 5125:2 993..1 749	0.80	g31231 65	100	420	3.8e- 37	ZINC FINGER PROTEI N 183 [Homo sapien s]
162959	ATU024 899	ATL8C1 964:96 9..255 8	nap					ATL8C1 964:96 9..255 8	0.80	g45875 26	100	1328	2.3e- 128	(AC007 060) Strong simila rity to F19I3. 2 []
162960	ATU024 900	ATL8C7 807:21 98..87 6	nap					ATL8C7 807:21 98..88 2	0.80	g49143 59	100	546	8.0e- 42	(AC007 289) hypoeth etical protein [Arabi dopsis thalia na]
162961	ATU024 901	ATL8C1 4782:2 562..8 560	nap					ATL8C1 4782:2 562..3 803, ATL8C1 4782:3	0.80, 0.54, 0.43	g43097 67, g30470 63	100, 100	4366, 185	0.0, 1.1e- 11	(AC006 217) putati ve Athila retro

162962	ATU024 902	ATL8C8 717:37 46..18 39	nap							963..5 896, ATL8C1 4782:6 906..8 503	0.80	g43097 03	100	580	8.8e- 39	lement ORF1 protein [Arabi dopsis thalia na]; (AF058 825) No defini tion line found [Arabi dopsis thalia na]
162963	ATU024 903	ATL8C1 6254:2 53..33 63	nap							ATL8C1 6254:2 53..33 63	0.79	g22249 11	100	2195	8.2e- 197	(U9304 8) somati c embryo genesi s recept or-

162968	ATU024 908	ATL8C1 659:14 2..418 9	nap						ATL8C1 659:14 2..415 3	0.79		g48504 12	100	3632	0.0	[Arabi dopsis thalia nal] (AC007 288) putati ve MuDR MURA transp osase [Arabi dopsis thalia nal]
162969	ATU024 909	ATL8C3 5282:6 672..4 18	nap						ATL8C3 5282:5 176..5 77	0.79		g43253 51, g42638 30	100, 39	3654, 517	0.0, 4.3e- 37	(AF128 394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei n (GB:X5 7297) [Arabi dopsis thalia nal]; (AC006 067) hypoth etical

162970	ATU024 910	ATL8C3 6558:2 713..1 270	nap					ATL8C3 6558:2 713..1 270	0.79	g42622 25	100	744	9.0e- 61	protein [Arabi dopsis thalia na] (AC006 200) putati ve phosph atidic acid phosph atase [Arabi dopsis thalia na]
162971	ATU024 911	ATL8C3 1050:2 183..3 40	nap					ATL8C3 1050:1 455..4 54	0.79	g44067 94, g45672 99	100, 64	1555, 162	5.1e- 132, 5.9e- 15	protein [Arabi dopsis thalia na]; (AC006 918) hypoth etical protein [Arabi dopsis thalia na]
162972	ATU024	ATL8C3	nap					ATL8C3	0.79	g44552	100	910	1.4e-	(AL035

162975	ATU024 915	ATL8C3 8134:3 71..42 95	nap					ATL8C3 8134:3 71..42 95	0.79	g33416 81	100	670	5.9e- 56	AC003 672) small GTP- bindin g protei n [Arabi dopsis thalia na]
162976	ATU024 916	ATL8C4 3437:3 387..3 9	nap					ATL8C4 3437:3 093..3 9	0.79	g43253 51	100	4006		(AF128 394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei n (GB:X5 7297) [Arabi dopsis thalia na]
162977	ATU024 917	ATL8C3 5946:2	nap					ATL8C3 5946:1	0.79	g48952 05	100	1104	1.0e- 104	(AC007 661)

162978	ATU024 918	ATL8C3 1595:1 66..12 18	nap					928..4 87	0.78	g32427 04	100	582	2.4e- 101	(AC003 040) hypoth etical protein [Arabi dopsis thalia na]
162979	ATU024 919	ATL8C9 47:836 4..108 03	nap					ATL8C9 47:859 8..107 26	0.78	g30212 65	100	2442	7.6e- 191	(AI022 347) protein kinase - like protein [Arabi dopsis thalia na]
162980	ATU024 920	ATL8C2 3523:1 312..4 47	nap					ATL8C2 3523:1 041..4 50	0.78	g43097 03	100	336	4.1e- 35	(AC006 266) putati ve transp oson protein

162981	ATU024 921	ATL8C1 7047:2 55..12 60	nap						ATL8C1 7047:2 55..11 93	0.78	g21911 96	100	550	2.0e- 42	n [Arabi dopsis thalia na]
162982	ATU024 922	ATL8C1 7043:3 35..11 28	nap						ATL8C1 7043:3 35..11 28	0.78	g12446 53	100	1163	2.7e- 76	(AF007 271) contai ns a MADS domain [Arabi dopsis thalia na]
162983	ATU024 923	ATL8C4 9817:3 462..1 365	nap						ATL8C4 9817:3 462..1 365	0.78	g22929 21	100	967	1.5e- 105	(U4100 0) gag gene produc t [Zea mays]
162984	ATU024 924	ATL8C5 756:24 89..6	nap						ATL8C5 756:23 57..6	0.78	g33778 33, g28646 21	100, 38	1691, 318		(Y1025 2) pantoa te-- beta- alanin e ligase [Lotus japoni cus]
															(AF075 598) contai ns simila rity to

162986	ATU024 926	ATL8C2 2365:1 13..10 60	nap					ATL8C2 2365:1 40..10 60	0.78	g32528 10	100	982	7.9e- 90	e-like protei n [Vicia fabal] (AC004 705) hypoth etical protei n [Arabi dopsis thalia nal]
162987	ATU024 927	ATL8C4 491:50 2..311 3	nap					ATL8C4 491:51 2..311 3	0.78	g44552 32	100	1668	3.5e- 167	(AL035 523) putati ve protei n [Arabi dopsis thalia nal]
162988	ATU024 928	ATL8C9 632:13 1..168 8	nap					ATL8C9 632:13 1..168 8	0.78	g43097 03	100	991	5.1e- 68	(AC006 266) putati ve transp oson protei n [Arabi dopsis thalia nal]
162989	ATU024 929	ATL8C2 3848:5 097..8	nap					ATL8C2 3848:3 651..8	0.78, 0.90	g40380 56	100	3452	0.0	(AC005 897) putati

162990	ATU024 930	7						7, ATL8C2 3848:4 974..4 365	0.77	g40380 66	100	124	0.0079	ve transp oson [Arabi dopsis thalia na]
		ATL8C3 4015:2 15..54 47	nap					ATL8C3 4015:2 15..44 52						(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
162991	ATU024 931	ATL8C1 2262:1 743..5 50	nap					ATL8C1 2262:1 743..5 50	0.77	g43357 41	100	1182	1.0e- 90	(AC006 248) putati ve revers e transc riptas e [Arabi dopsis thalia na]
162992	ATU024 932	ATL8C3 9202:4 489..1 780	nap					ATL8C3 9202:4 489..2 245	0.77	g42630 63	100	1947	9.6e- 167	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]

162993	ATU024 933	ATL8C1 7626:3 669..4 387	nap				ATL8C1 7626:3 669..4 387	0.77	g33722 33	100	409	6.2e- 39	(AF019 248) RNA polyme rase I, II and III 24.3 kDa subuni t [Arabi dopsis thalia nal]
162994	ATU024 934	ATL8C1 3124:6 330..4 840	nap				ATL8C1 3124:6 104..4 958	0.77	g16286 22	100	963	9.2e- 103	(U7263 1) flavon ol syntha se [Arabi dopsis thalia nal]
162995	ATU024 935	ATL8C1 7384:1 063..8 9	nap				ATL8C1 7384:1 063..2 49	0.77	g30804 50	100	510	1.3e- 54	(AL022 605) hypoth etical protei n [Arabi dopsis thalia nal]
162996	ATU024 936	ATL8C3 2878:6 024..4 303	nap				ATL8C3 2878:6 024..4 303	0.77	g17031 47	100	348	1.8e- 38	ACTIN, ALPHA ANOMAL OUS

162997	ATU024 937	ATL8C9 258:42 69..68 1	nap					ATL8C9 258:42 69..68 1	0.77		g38106 01, g38057 69	100, 87	1263, 2293	[Fugu rubrip es] (AC005 398) hypoth etical protei n [Arabi dopsis thalia na]; (AC005 693) putati ve mudR- like transp oson [Arabi dopsis thalia na]
162998	ATU024 938	ATL8C1 0295:3 35..21 44	nap					ATL8C1 0295:3 35..20 92	0.77		g40380 66	100	729	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
162999	ATU024 939	ATL8C3 2392:2 603..3 15	nap					ATL8C3 2392:2 004..3 15	0.77		g48369 29	100	1732	(AC006 085) Hypoth etical protei n

163000	ATU024 940	ATL8C4 8538:4 868..3 815	nap						ATL8C4 8538:4 868..3 994	0.77	g40380 66	100	723	2.3e- 21	n [Arabi dopsis thalia na] (AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
163001	ATU024 941	ATL8C2 4784:2 078..2 51	nap						ATL8C2 4784:2 078..2 67	0.77	g46462 26	100	1231	6.9e- 102	(AC007 235) hypoth etical protei n [Arabi dopsis thalia na]
163002	ATU024 942	ATL8C1 4761:2 42..11 75	nap						ATL8C1 4761:2 42..10 23	0.77	g40380 66	100	529	9.0e- 40	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
163003	ATU024 943	ATL8C1 3582:6 290..5 508	nap						ATL8C1 3582:6 241..5 508	0.77	g40380 66	100	766	2.1e- 30	(AC005 897) hypoth etical protei n

163004	ATU024 944	ATL8C3 9936:9 74..34	nap					ATL8C3 9936:7 54..61	0.77	g40380 53	100	1055	2.2e- 110	n [Arabi dopsis thalia na] (AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
163005	ATU024 945	ATL8C3 8620:9 28..11 9	nap					ATL8C3 8620:9 28..18 2	0.77	g30471 13	100	511	2.7e- 59	(AF058 919) No defini tion line found [Arabi dopsis thalia na]
163006	ATU024 946	ATL8C2 1244:2 549..3 536	nap					ATL8C2 1244:3 064..3 536	0.77	g43097 03	100	535	6.3e- 44	(AC006 266) putati ve transp oson protei n [Arabi dopsis thalia na]
163007	ATU024 947	ATL8C2 9547:2	nap					ATL8C2 9547:2	0.77	g45444 60	100	1014	2.7e- 71	(AC006 592)

163010	ATU024 950	ATL8C2 4686:3 683..1 707	nap					ATL8C2 4686:3 683..2 110	0.76	g32128 63	100	1007	1.0e- 101	e [Arabi dopsis thalia na] (AC004 005) putati ve transl ation initia tion factor [Arabi dopsis thalia na]
163011	ATU024 951	ATL8C4 7439:1 ..3460	nap					ATL8C4 7439:1 75..34 09	0.76	g43097 03, g43253 51	100, 82	1088, 3126	1.1e- 96, 0.0	(AC006 266) putati ve transp oson protei n [Arabi dopsis thalia na]; (AF128 394) simila r to Antirr hinum majus (garde n snapdr

163015	ATU024 955	ATL8C4 5140:3 078..9 87	nap				ATL8C4 5140:3 078..9 87	0.75	g43098 68	100	707	3.4e- 68	na] (AC006 527) putati ve retrot ranspo son- like orf [Arabi dopsis thalia na]
163016	ATU024 956	ATL8C4 9260:2 480..9 56	nap				ATL8C4 9260:2 480..9 56	0.75	g31641 36	100	1996	2.3e- 154	(D7860 3) cytoch rome P450 monoox ygenas e [Arabi dopsis thalia na]
163017	ATU024 957	ATL8C4 0590:3 823..1 892	nap				ATL8C4 0590:3 823..1 932	0.75	g47739 18	100	1968	1.9e- 148	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
163018	ATU024 958	ATL8C7 105:34 8..238	nap				ATL8C7 105:63 6..238	0.75	g43253 48	100	1891	4.8e- 149	(AF128 394) contai

163019	ATU024 959	2	ATL8C1 3514:2 145..1	nap						ATL8C1 3514:1 624..5 12	0.75				g47551 96, g45393 69	100, 51	529, 460	7.9e- 52, 1.9e- 41	ns similarity to phosphate transporters [Arabidopsis thaliana]
163020	ATU024 960	2	ATL8C4 6235:8	nap						ATL8C4 6235:8	0.75				g39414 72	100	274	2.6e- 28	(AC007 018) similarity to the GDSL family of lipolytic enzymes [Arabidopsis thaliana]; (AL049 525) putative protein [Arabidopsis thaliana]
																			(AF062 890)

		28..17 47						28..17 10							putative transcription factor [Arabidopsis thaliana]
163021	ATU024 961	ATL8C1 3907:2 027..5 253	nap					ATL8C1 3907:2 027..5 253	0.75	g33273 96	100	2267	1.9e- 134	(AC004 483) hypothetical protein [Arabidopsis thaliana]	
163022	ATU024 962	ATL8C1 7005:2 450..1 071	nap					ATL8C1 7005:2 001..1 246	0.75	g48369 26	100	784	3.7e- 52	(AC006 085) Hypothetical protein [Arabidopsis thaliana]	
163023	ATU024 963	ATL8C4 171:13 27..46 89	nap					ATL8C4 171:13 45..46 89	0.75	g27022 78	100	398	1.7e- 18	(AC003 033) hypothetical protein [Arabidopsis thaliana]	

163024	ATU024 964	ATL8C6 723:14 69..48 8	nap				ATL8C6 723:14 01..60 6	0.75	g45824 55	100	452	5.0e- 48	(AC007 071) putati ve recept or protei n kinase [Arabi dopsis thalia na]
163025	ATU024 965	ATL8C3 5461:2 265..1	nap				ATL8C3 5461:2 058..3 85	0.75	g45672 93, g43888 25	100, 52	412, 874	2.5e- 37, 1.0e- 75	(AC006 918) putati ve Athila retroeo lement ORF1 protei n [Arabi dopsis thalia na]; (AC006 528) putati ve pol polypr oteins with revers e transc riptas e domain

163028	ATU024 968	ATL8C2 7639:1 ..3900	nap						ATL8C2 7639:2 92..26 09	0.74	g62969 3, g44173 09	100, 90	457, 3012				(Pfam: PF0007 8) [Arabi dopsis thalia nal; (AC006 413) putati ve Athila ORF1 protei n [Arabi dopsis thalia nal] le integr ase - common tobacc o (fragm ent) [Nicot iana tabacu m]; (AC006 446) putati ve pol polypr oteins with a revers
--------	---------------	----------------------------	-----	--	--	--	--	--	----------------------------------	------	------------------------------	------------	--------------	--	--	--	--

163029	ATU024 969	ATL8C1 6663:1 754..1 57	nap					ATL8C1 6663:1 142..1 57	0.74	g22136 26	100	765	1.1e- 77	e transc riptas e domain [Arabi dopsis thalia na]
163030	ATU024 970	ATL8C2 2345:2 238..5 84	nap					ATL8C2 2345:2 238..5 84	0.74	g44067 59	100	256	3.7e- 19	(AC006 836) hypoth etical protei n [Arabi dopsis thalia na]
163031	ATU024 971	ATL8C4 9901:8 87..43 56	nap					ATL8C4 9901:8 87..43 50	0.74	g43887 19	100	2053	1.8e- 165	(AC006 413) putati ve myosin -like protei n [Arabi dopsis thalia na]
163032	ATU024	ATL8C4	nap					ATL8C4	0.74	g22448	100	1883	1.1e-	(Z9733)

972	158:20 05...51 5					158:19 31...51 5	0.74	95	180	8) simila r to cytoch rome P450 [Arabi dopsis thalia na]
163033	ATU024 973	ATL8C7 663:52 71...42 4	nap			ATL8C7 663:49 20...42 4	0.74	g29824 38, g48369 29	883, 1281 7.4e- 74, 1.8e- 115	(AL022 224) cadine ne syntha se like protei n [Arabi dopsis thalia na]; (AC006 085) Hypoth etical protei n [Arabi dopsis thalia na]
163034	ATU024 974	ATL8C4 8443:8 5...145 8	nap			ATL8C4 8443:8 5...140 9	0.74	g44328 17	1006 100	4.4e- 96 (AC006 593) unknow n protei n [Arabi

163035	ATU024 975	ATL8C4 2447:1 ..2779	nap						ATL8C4 2447:3 41..12 40	0.74		948952 24, g44159 31	100, 41	1322, 117	7.1e- 101, 3.4e- 13	dopsis thalia nal (AC007 660) putati ve revers e transc riptas e [Arabi dopsis thalia nal; (AC006 418) unknow n protei n [Arabi dopsis thalia nal]
163036	ATU024 976	ATL8C3 1598:1 ..5341	nap						ATL8C3 1598:1 19..53 35	0.73		g30212 76, g30212 77	100, 69	1407, 3056	5.6e- 107, 1.5e- 281	(AL022 347) serine /threo nine kinase - like protei n [Arabi dopsis thalia nal; (AL022

163037	ATU024 977	ATL8C4 040:16 34..87	nap						0.73	g47551 98	100	762	1.9e- 64	(AC007 018) putative zinc finger protein [Arabi dopsis thaliana]
163038	ATU024 978	ATL8C5 966:89 8..206 7	nap						0.73	g33784 91	100	559		(AJ007 578) pRIB5 protein [Ribes nigrum]
163039	ATU024 979	ATL8C3 3492:1 835..6 3	nap						0.73	g47739 18	100	1822	1.3e- 127	(AF147 259) No definition line found [Arabi dopsis]

163040	ATU024 980	ATL8C1 2999:2 1..301 0	nap				ATL8C1 2999:2 1..298 1	0.73	g45859 33, g45811 64	100, 46	769, 1284	1.8e- 60, 9.8e- 106	thalia nal (AC007 211) hypothesis etical protein [Arabi dopsis thalia nal; (AC006 220) putative polyprotein [Arabi dopsis thalia nal]
163041	ATU024 981	ATL8C4 2012:1 329..4 667	nap				ATL8C4 2012:1 658..4 481	0.73	g43887 19	100	2028	7.4e- 178	(AC006 413) putative myosin- like protein [Arabi dopsis thalia nal]
163042	ATU024 982	ATL8C2 0786:4 46..15 83	nap				ATL8C2 0786:4 46..15 83	0.73	g22528 27	100	1366	4.4e- 134	(AF013 293) No definition line

163043	ATU024 983	ATL8C1 3004:6 053..7 227	nap					ATL8C1 3004:6 053..7 181	0.73		g37023 32	100	552	7.9e- 37	found [Arabi dopsis thalia na] (AC005 397) unknow n protei n [Arabi dopsis thalia na]
163044	ATU024 984	ATL8C2 4259:7 6..129 2	nap					ATL8C2 4259:7 6..129 2	0.73		g30466 93	100	711	3.4e- 65	(AL022 140) recept or like protei n (fragm ent) [Arabi dopsis thalia na]
163045	ATU024 985	ATL8C1 0319:1 786..3 855	nap					ATL8C1 0319:1 786..3 855	0.73		g22709 94	100	684		(AF004 809) Ca+2- bindin g EF hand protei n [Glyci ne max]
163046	ATU024	ATL8C4	nap					ATL8C4	0.72		g42622	100,	1413,	5.1e-	(AC006

163048	ATU024 988	ATL8C5 436:46 4..174 2	nap						ATL8C5 436:58 1..174 1	0.72	g45126 31	100	1289	2.1e- 134	riptase (Pfam: PF0007 8 rvt, E=4.3e -08) [Arabi dopsis thalia na]
163049	ATU024 989	ATL8C1 2203:1 905..3 558	nap						ATL8C1 2203:1 914..3 539	0.72	g26739 15	100	1004	1.7e- 98	(AC002 561) putati ve cytoch rome P-450 [Arabi dopsis thalia na]
163050	ATU024 990	ATL8C3 476:32 55..2	nap						ATL8C3 476:30 98..85 5	0.72	g22450 81	100	2171	3.3e- 195	(Z9734 3) myosin II heavy chain homolo

163051	ATU024 991	ATL8C3 686:69 69..13	nap						ATL8C3 686:69 69..13	0.72	g46462 27	100	3548	0.0	g [Arabi dopsis thalia na] (AC007 235) hypoth etical protei n [Arabi dopsis thalia na]
163052	ATU024 992	ATL8C1 6410:1 550..4 5	nap						ATL8C1 6410:1 550..2 33	0.72	g27393 73, g62966 9	100, 100	883, 696	4.6e- 85, 9.4e- 67	(AC002 505) putati ve flavon ol 3- o- glucos yltran sferas e [Arabi dopsis thalia na]; hypoth etical protei n - tomato []
163053	ATU024 993	ATL8C2 0686:2 326..2 79	nap						ATL8C2 0686:8 62..30 5	0.71	g42621 75, g44328 66	100, 39	812, 664	4.2e- 78, 1.5e- 50	(AC005 508) 12894 [Arabi

163054	ATU024 994	ATL8C2 4532:2 693..4 52	nap					ATL8C2 4532:2 693..5 23	0.71	946782 01	100	1751	5.9e- 172	dopsis thalia nal; (AC006 300) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
163055	ATU024 995	ATL8C1 4522:1 1915.. 7454	nap					ATL8C1 4522:1 0994.. 9451	0.71	925650 07	100	4121	0.0	(AC002 983) predic ted transp oson protei n [Arabi dopsis thalia nal]
163056	ATU024 996	ATL8C4 6050:3	nap					ATL8C4 6050:3	0.71	929613 77	100	3319	1.3e- 310	(AL022 141)

163057	ATU024 997	ATL8C1 6753:2 474..1 44	nap					54..37 23	0.71	g37639 31	100	2049	5.6e- 146	putative receptor protein kinase [Arabidopsis thaliana]
163058	ATU024 998	ATL8C5 799:19 25..91 1	nap					ATL8C5 799:19 25..11 38	0.71	g47739 11	100	1146		(AC004 450) hypothetical protein [Arabidopsis thaliana]
163059	ATU024 999	ATL8C1 3039:3 531..7 041	nap					ATL8C1 3039:3 531..6 835	0.71	g41382 82	100	3274	0.0	(AF147 259) No definition line found [Arabidopsis thaliana]
														(AJ011 576) RNA- direct ed RNA polymerase [Nicotiana]

163060	ATU025 000	ATL8C1 0310:1 110..5 242	nap				ATL8C1 0310:1 110..5 242	0.71	g43253 77	100	1678		iana tabacu m] (AF128 396) simila r to maize transp oson MuDR- like protei ns [Arabi dopsis thalia na]
163061	ATU025 001	ATL8C1 2392:2 290..2 17	nap				ATL8C1 2392:2 212..2 17	0.71	g34027 18	100	1584	2.1e- 142	(AC004 261) hypoth etical protei n [Arabi dopsis thalia na]
163062	ATU025 002	ATL8C2 0899:1 98..27 05	nap				ATL8C2 0899:1 98..26 67	0.71	g44327 95	100	824	1.3e- 38	(AC006 437) putati ve protei n 2 of of the En/Spm transp osable elemen t

163063	ATU025 003	ATL8C8 667:52 84..25 32	nap						ATL8C8 667:52 84..25 32	0.71	g42622 10	100	1766	9.6e- 177	system of Zea mays [Arabi dopsis thalia na] (AC006 161) simila r to leucin e zipper transc riptio n factor [Arabi dopsis thalia na]
163064	ATU025 004	ATL8C1 8801:1 633..3 5	nap						ATL8C1 8801:1 380..3 5	0.71	g43097 56	100	799	7.9e- 100	(AC006 217) putati ve transp osase [Arabi dopsis thalia na]
163065	ATU025 005	ATL8C2 9:1238 ..2556	nap						ATL8C2 9:1255 ..2556	0.71	g45389 68	100	1283	8.3e- 131	(AL049 488) putati ve protei n kinase [Arabi

163068	ATU025 008	ATL8C2 0579:1 347..6 998	nap				ATL8C2 0579:1 347..6 621	0.70	g49143 61, g37383 37	100, 34	4633, 1875	0.0, 1.6e- 192	thalia nal (AC007 289) putati ve revers e transc riptas e [Arabi dopsis thalia nal; (AC005 170) putati ve revers e transc riptas e [Arabi dopsis thalia nal (AC006 067) hypoth etical protei n [Arabi dopsis thalia nal (AC007 369)
163069	ATU025 009	ATL8C8 999:59 79..20 15	nap				ATL8C8 999:59 79..20 15	0.70	g42638 30	100	2813	1.7e- 215	(AC006 067) hypoth etical protei n [Arabi dopsis thalia nal (AC007 369)
163070	ATU025 010	ATL8C3 5642:4	nap				ATL8C3 5642:4	0.70	g48368 97	100	682	1.5e- 57	(AC007 369)

163074	ATU025 014	ATL8C1 7962:3 004..5 9	nap				ATL8C1 7962:3 004..3 29	0.70	g45824 58	100	1051		(AC007 071) hypoth etical protei n [Arabi dopsis thalia na]
163075	ATU025 015	ATL8C1 3906:1 862..2 533	nap				ATL8C1 3906:2 035..2 352	0.70	g40380 66	100	670	1.3e- 49	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
163076	ATU025 016	ATL8C3 9536:3 84..13 59	nap				ATL8C3 9536:4 52..13 59	0.70	g42637 69	100	707	3.5e- 48	(AC006 218) hypoth etical protei n [Arabi dopsis thalia na]
163077	ATU025 017	ATL8C1 4458:2 573..6 481	nap				ATL8C1 4458:2 573..6 481	0.70	g43253 51, g43097 03	100, 100	4071, 1189	0.0, 1.3e- 113	(AF128 394) simila r to Antirr hinum majus (garde n snapdr

163080	ATU025 020	ATL8C4 7105:4 560..1	nap					9456:7 687..8 285	0.70	g33273 93, g37460 69	100, 68	698, 2943	1.0e- 65, 8.1e- 302	n [Arabi dopsis thalia na] (AC004 483) hypoth etical protei n [Arabi dopsis thalia na]; (AC005 311) putati ve revers e transc riptas e [Arabi dopsis thalia na]
163081	ATU025 021	ATL8C6 849:53 0..181 5	nap					ATL8C6 849:78 6..160 1	0.70	g42622 13	100	1275	2.6e- 123	(AC006 161) hypoth etical protei n [Arabi dopsis thalia na]
163082	ATU025 022	ATL8C2 937:1.	nap					ATL8C2 937:83	0.70, 0.54	g40380 66,	100, 44	575, 1788	3.8e- 32,	(AC005 897)

163084	ATU025 024	ATL8C1 667:1. .5428	nap						0.69, 0.53	g43097 03, g43253 51, g43253 49	100, 83, 47	995, 2887, 219	8.6e- 94, 9.6e- 271, 9.9e- 19	thalia nal (AC006 266) putati ve transp oson protei n [Arabi dopsis thalia nal; (AF128 394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei n (GB:X5 7297) [Arabi dopsis thalia nal; (AF128 394) contai ns simila rity
--------	---------------	---------------------------	-----	--	--	--	--	--	---------------	--	----------------	----------------------	--	--

163085	ATU025 025	ATL8C2 8213:4 41..25 20	nap						ATL8C2 8213:1 461..2 359	0.69	g30471 22, g30471 16	100, 44	1559, 154	3.0e- 105, 1.2e- 09	(AF058 919) F6N23. 29 gene produc t [Arabi dopsis thalia nal; (AF058 919) No defini tion line found [Arabi dopsis thalia nal]	to Petuni a PTTA' (GB:AF 009516) [Arabi dopsis thalia nal]
163086	ATU025 026	ATL8C1 4441:5 7..339 0	nap						ATL8C1 4441:5 7..339 0	0.69	g45672 96	100	2179	7.7e- 202	(AC006 918) putati ve Athila retro element	

163087	ATU025 027	ATL8C2 3352:6 66..33 14	nap						0.69	g44067 94	100	1934	3.5e- 161	ORF1 protein [Arabidopsis thaliana]
163088	ATU025 028	ATL8C3 5552:3 57..11 13	nap						0.69	g44172 91	100	374	9.3e- 40	(AC007 019) hypothetical protein [Arabidopsis thaliana]
163089	ATU025 029	ATL8C3 5320:2 972..5 06	nap						0.69	g21601 44	100	794	2.3e- 92	(AC000 375) Strong similarity to Arabidopsis oligopeptide transporter (gb X7

163090	ATU025 030	ATL8C1 827:77 3..93	nap						ATL8C1 827:77 3..165	0.69	g42622 41	100	280	6.5e- 29	(AC006 200) unknown protein [Arabi dopsis thalia na]	7503). [Arabi dopsis thalia na]
163091	ATU025 031	ATL8C3 2565:2 556..1 36	nap						ATL8C3 2565:2 556..1 36	0.69	g37023 19	100	503	2.1e- 26	(AC005 397) hypoth etical protein [Arabi dopsis thalia na]	
163092	ATU025 032	ATL8C4 9749:4 59..19 98	nap						ATL8C4 9749:4 59..19 98	0.69	g41917 74	100	1598	1.8e- 168	(AC005 917) putati ve beta- 1,3- endogl ucanas e [Arabi dopsis thalia na]	
163093	ATU025 033	ATL8C3 4952:3	nap						ATL8C3 4952:1	0.69, 0.93	g33784 91	100	445	1.3e- 46	(AJ007 578)	

163094	ATU025 034	189..3 10	nap						523..3 10, ATL8C3 4952:3 189..1 925	0.69	g33778 53	100	1282	1.9e- 121	pRIB5 protei n [Ribes nigrum]
		ATL8C1 269:31 37..39 3							ATL8C1 269:31 37..39 3						(AF076 274) No defini tion line found [Arabi dopsis thalia na]
163095	ATU025 035	ATL8C3 682:80 70..74 1	nap						ATL8C3 682:79 04..74 1	0.69	g37775 27	100	3222	0.0	(AF053 008) gag- pol polypr otein [Glyci ne max]
163096	ATU025 036	ATL8C1 3612:1 1351.. 4253	nap						ATL8C1 3612:1 1053.. 4253	0.69	g43253 51	100	3589	0.0	(AF128 394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei n

163097	ATU025 037	ATL8C3 4812:1 475..4 07	nap						ATL8C3 4812:1 307..4 07	0.69	g46782 16	100	883	3.6e- 96	(GB:X5 7297) [Arabi dopsis thalia na]
163098	ATU025 038	ATL8C1 730:16 49..37 54	nap						ATL8C1 730:17 02..37 54	0.68	g42630 63	100	1798	9.5e- 182	(AC005 142) hypoth. etical protei n [Arabi dopsis thalia na]
163099	ATU025 039	ATL8C5 413:23 ..2762	nap						ATL8C5 413:23 ..2762	0.68	g38106 01	100	1159	4.7e- 93	(AC005 398) hypoth. etical protei n [Arabi dopsis thalia na]
163100	ATU025 040	ATL8C2 9600:2 363..1 343	nap						ATL8C2 9600:2 363..1 343	0.68	g47139 50	100	1182	7.4e- 114	(AC007 293) hypoth. etical

163101	ATU025 041	ATL8C4 3899:3 46..14 90	nap						ATL8C4 3899:5 61..14 90	0.68		g40068 21	100	942		protein [Arabi dopsis thalia na] (AC005 970) hypoth etical protein [Arabi dopsis thalia na]
163102	ATU025 042	ATL8C3 2769:4 02..13 80	nap						ATL8C3 2769:7 13..13 80	0.68		g45444 60	100	1074	3.8e- 99	(AC006 592) putati ve revers e transc riptase [Arabi dopsis thalia na]
163103	ATU025 043	ATL8C2 0809:3 947..1 41	nap						ATL8C2 0809:3 890..1 83	0.68		g32427 13, g32427 12	100, 99	3760, 568	0.0, 8.4e- 47	(AC003 040) putati ve transp osase [Arabi dopsis thalia na]; (AC003

163104	ATU025 044	ATL8C1 3183:7 56..40 76	nap						ATL8C1 3183:8 79..40 76	0.68	g22135 94	100	1461	9.0e- 127	040) hypoth etical protein [Arabi dopsis thalia na]
163105	ATU025 045	ATL8C6 61:866 5..197 7	nap						ATL8C6 61:866 5..453 2	0.68	g42638 31	100	6524	0.0	(AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia na]
163106	ATU025 046	ATL8C1 3622:3 173..5 569	nap						ATL8C1 3622:3 329..5 319	0.68	g42630 63	100	2636	2.8e- 214	(AC005 142) hypoth etical protein [Arabi dopsis thalia na]

163107	ATU025 047	ATL8C3 5987:2 523..1	nap				ATL8C3 5987:2 449..6 1	0.68	g38314 49, g29110 81, g45811 24	100, 65 77,	173, 113, 121	1.0e- 16, 4.9e- 21, 3.0e- 06	(AC005 700) hypoth etical protei n, 3, partia l [Arabi dopsis thalia nal]; (AL021 960) putati ve protei n [Arabi dopsis thalia nal]; (AC005 825) hypoth etical protei n [Arabi dopsis thalia nal]
163108	ATU025 048	ATL8C2 5730:1 990..2 945	nap				ATL8C2 5730:1 990..2 805	0.67	g42206 12	100	1485	3.3e- 153	(AB021 934) nicoti anamin e syntha se [Arabi

163109	ATU025 049	ATL8C4 5314:1 143..5 9	nap						ATL8C4 5314:8 62..59	0.67		g45811 12	100	938	2.1e- 99	dopsis thalia na] (AC005 825) putati ve zinc finger protei n [Arabi dopsis thalia na]
163110	ATU025 050	ATL8C1 4522:2 284..3 81	nap						ATL8C1 4522:2 284..5 94	0.67		g33778 53	100	654	1.3e- 50	(AF076 274) No defini tion line found [Arabi dopsis thalia na]
163111	ATU025 051	ATL8C1 8504:3 375..1 401	nap						ATL8C1 8504:3 375..1 401	0.67		g11768 14	100	310	6.4e- 23	HYPOTH ETICAL 31.3 KD PROTEI N IN AGAI- MTR INTERG ENIC REGION (F286) [Esche richia

163112	ATU025 052	ATL8C4 1519:1 ..1437	nap				ATL8C4 1519:1 7..143 7	0.67	g23927 63	100	824	3.4e- 83	coli] (AC002 534) hypoth etical protei n [Arabi dopsis thalia na]
163113	ATU025 053	ATL8C1 3982:1 ..4302	nap				ATL8C1 3982:2 02..28 88	0.67	g45811 11, g26186 92	100, 30	4217, 98	0.0, 1.9e- 05	(AC005 825) putati ve revers e transc riptas e [Arabi dopsis thalia na]; (AC002 510) putati ve zinc- finger protei n [Arabi dopsis thalia na]
163114	ATU025 054	ATL8C1 6647:5 364..3 535	nap				ATL8C1 6647:5 364..3 747	0.67	g49143 71	100	1174	3.2e- 90	(AC007 584) unknow n

163115	ATU025 055	ATL8C4 1772:2 56..27 76	nap						ATL8C4 1772:2 56..20 34	0.67	g30804 20	100	2024	3.2e- 193	protein [Arabi dopsis thalia na]
163116	ATU025 056	ATL8C8 78:245 5..972 1	nap						ATL8C8 78:245 5..709 3, ATL8C8 78:746 6..972 1	0.67, 0.59	g44328 02	100	3939	7.4e- 278	(AL022 604) putati ve sugar transp orter protei n [Arabi dopsis thalia na]
163117	ATU025 057	ATL8C4 1968:6 201..1 514	nap						ATL8C4 1968:6 201..1 514	0.67	g44067 91	100	813	5.6e- 62	(AC006 437) putati ve pol ypr oteins, 5, partia l [Arabi dopsis thalia na]

163118	ATU025 058	ATL8C4 8593:1 128..9 3	nap					ATL8C4 8593:1 128..9 4	0.67	g36081 28	100	1183	3.2e- 94	thalia nal (AC005 314) hypoth etical protei n [Arabi dopsis thalia nal]
163119	ATU025 059	ATL8C1 666:16 09..53 54	nap					ATL8C1 666:19 17..53 54	0.67	g40637 59	100	2915	3.7e- 256	(AC005 561) hypoth etical protei n [Arabi dopsis thalia nal]
163120	ATU025 060	ATL8C4 7150:1 686..5 00	nap					ATL8C4 7150:1 686..6 53	0.67	g47339 60	100	1331	5.8e- 119	(AC007 294) putati ve zinc- finger protei n [Arabi dopsis thalia nal]
163121	ATU025 061	ATL8C3 4037:1 28..21 50	nap					ATL8C3 4037:1 28..21 50	0.66	g43098 68	100	341	1.9e- 29	(AC006 527) putati ve retrot ranspo

163122	ATU025 062	ATL8C3 701:13 6..162 5	nap						ATL8C3 701:13 6..162 5	0.66	933778 38	100	895	1.6e- 81	(AF075 598) No defini tion line found [Arabi dopsis thalia na]
163123	ATU025 063	ATL8C9 278:69 95..81 53	nap						ATL8C9 278:71 84..81 52	0.66	942622 13	100	689		(AC006 161) hypoth etical protei n [Arabi dopsis thalia na]
163124	ATU025 064	ATL8C2 4820:3 996..3 60.	nap						ATL8C2 4820:3 996..3 60	0.66	943253 48	100	2029	2.3e- 145	(AF128 394) contai ns simila rity to phosph ate transp orters [Arabi

163125	ATU025 065	ATL8C3 9873:2 552..1 99	nap						ATL8C3 9873:2 552..1 99	0.66	g46462 07	100	1154	9.0e- 111	dopsis thalia nal (AC007 230) Contai ns simila rity to []
163126	ATU025 066	ATL8C3 3405:2 797..1 744	nap						ATL8C3 3405:2 758..1 904	0.66	g33778 55	100	1390	1.6e- 75	(AF076 274) contai ns simila rity to revers e trancr iptase (Pfam: rvt.hm m, score: 96.80) and CCHC- type zinc finger s (Pfam: zf- CCHC.h mm, score: 14.43) [Arabi dopsis

163127	ATU025 067	ATL8C4 7038:1 956..4 938	nap				ATL8C4 7038:1 956..4 938	0.66	g43253 51	100	4149	0.0	thalia nal (AF128 394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei n (GB:X5 7297) [Arabi dopsis thalia nal]
163128	ATU025 068	ATL8C2 3951:1 694..5 60	nap				ATL8C2 3951:1 694..8 45	0.66	g35823 22	100	1443	1.6e- 142	(AC005 496) hypoth etical protei n [Arabi dopsis thalia nal]
163129	ATU025 069	ATL8C3 8072:7 60..18 67	nap				ATL8C3 8072:7 66..18 40	0.65	g45389 17	100	382	3.9e- 47	(AL049 482) putati ve protei n [Arabi dopsis thalia nal]

163130	ATU025 070	ATL8C8 27:285 1..543	nap					ATL8C8 27:285 1..560	0.65	g28275 50	100	3083	9.0e- 313	thalia nal (AL021 635) leucin e rich repeat recept or kinase -like protei n [Arabi dopsis thalia nal]
163131	ATU025 071	ATL8C3 1479:6 9..416 3	nap					ATL8C3 1479:8 8..410 7	0.65	g33778 45, g42636 58	100, 32	1212, 617	9.0e- 95, 3.0e- 41	(AF076 274) contai ns simila rity to the basic region plus leucin e zipper trancr iption factor s (Pfam: bZIP.h mm, score: 12.77) [Arabi

163134	ATU025 074	ATL8C3 7719:3 05..13 09	nap					ATL8C3 7719:5 16..36 9	0.65	946789 26	100	483	8.6e- 35	protein [Arabi dopsis thalia na]; (AF074 021) putati ve transp oson protei n [Arabi dopsis thalia na]
163135	ATU025 075	ATL8C4 1007:3 85..10 41	nap					ATL8C4 1007:4 81..87 6	0.65	940380 66	100	648	1.2e- 44	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
163136	ATU025 076	ATL8C1 1171:4	nap					ATL8C1 1171:3	0.65	943253 51	100	4046	0.0	(AF128 394)

163137	ATU025 077	216..3 57	nap						922..3 57	0.65	942637 68	100	1338	6.5e- 128	similar to Antirrhinum majus (guardin snapdragon) TNF2 protein (GB:X57297) [Arabidopsis thaliana]
163138	ATU025 078	216..3 57	nap						ATL8C3 300:36 14..18 36	0.65	938057 69	100	2432	6.2e- 256	(AC006218) hypothetical protein [Arabidopsis thaliana]
									ATL8C1 6337:2 261..1 56	0.65					(AC005693) putative mudR-like transposon [Arabidopsis thaliana]

163139	ATU025 079	ATL8C1 9795:6 281..4 317	nap				ATL8C1 9795:6 281..4 462	0.65	g45389 06	100	1176	1.1e- 114	(AL049 482) cholin e kinase GmCK2p -like protei n [Arabi dopsis thalia na]
163140	ATU025 080	ATL8C1 2707:9 357..1 1866	nap				ATL8C1 2707:9 357..1 1866	0.65	g42622 13	100	923	2.0e- 92	(AC006 161) hypoth etical protei n [Arabi dopsis thalia na]
163141	ATU025 081	ATL8C2 2357:5 724..5 46	nap				ATL8C2 2357:5 724..5 64	0.65	g42622 10, g40068 33	100, 47	1982, 1454	3.1e- 187, 7.5e- 138	(AC006 161) simila r to leucin e zipper transc riptio n factor [Arabi dopsis thalia na]; (AC005 970)

163142	ATU025 082	ATL8C1 3927:7 93..31 35	nap						ATL8C1 3927:7 93..30 81	0.65	934618 20	100	206	2.7e- 17	(AC004 138) unknown protein [Arabi dopsis thalia na]
163143	ATU025 083	ATL8C9 627:68 97..16 6	nap						ATL8C9 627:68 97..16 6	0.65	940380 56	100	3727	0.0	(AC005 897) putative transp oson [Arabi dopsis thalia na]
163144	ATU025 084	ATL8C1 3567:5 885..1	nap						ATL8C1 3567:5 885..4 30	0.65	943253 51, 947339 96	100, 42	3733, 800	0.0, 7.6e- 72	(AF128 394) similar to Antirr hinum majus (garde n

163145	ATU025 085	ATL8C4 3293:3 ..2687	nap															snapdr agon) TNP2 protei n (GB:X5 7297) [Arabi dopsis thalia na]; (AC007 188) hypothe tical protei n [Arabi dopsis thalia na]
																		(AC006 918) putati ve pol ypr otei n [Arabi dopsis thalia na]
163146	ATU025 086	ATL8C1 0388:1 00..25 41	nap															(AC005 824) hypothe tical protei n [Arabi dopsis thalia

163147	ATU025 087	ATL8C2 263:33 47..59 4	nap				ATL8C2 263:32 58..59 4	0.64		g45672 95, g47739 20	100, 61	1647, 1878	4.7e- 172, 1.3e- 173	na] (AC006 918) putati ve pol polypr otein [Arabi dopsis thalia na]; (AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]
163148	ATU025 088	ATL8C1 3544:1 ..1154	nap				ATL8C1 3544:7 3..626	0.64		g40380 66, g47739 10	100, 71	127, 124	0.16, 5.8e- 08	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]; (AF147 259) No defini tion line found [Arabi

163149	ATU025 089	ATL8C4 2457:7 621..9 432	nap					ATL8C4 2457:7 719..9 369	0.64	g45672 96	100	2350	7.2e- 199	dopsis thalia na] (AC006 918) putati ve Athila retro element ORF1 protei n [Arabi dopsis thalia na]
163150	ATU025 090	ATL8C7 340:13 31..25 6	nap					ATL8C7 340:12 89..82 9	0.64	g44173 07	100	1431	3.0e- 142	(AC006 446) putati ve pol ypr otei n [Arabi dopsis thalia na]
163151	ATU025 091	ATL8C1 912:31 69..7	nap					ATL8C1 912:31 69..7	0.64	g48836 17	100	1190	1.8e- 115	(AC006 922) unknow n protei n [Arabi dopsis thalia na]
163152	ATU025 092	ATL8C1 358:70 80..43	nap					ATL8C1 358:70 80..43	0.63	g42621 42	100	673	1.1e- 65	(AC005 275) putati

163155	ATU025 095	ATL8C4 2457:4 486..6 429	nap					ATL8C4 2457:5 500..6 198	0.63	g45672 95	100	2058	7.4e- 214	na] (AC006 918) putati ve pol polypr otein [Arabi dopsis thalia na]
163156	ATU025 096	ATL8C2 0622:4 905..5 5	nap					ATL8C2 0622:4 905..5 5	0.63	g44163 02	100	5249	0.0	(AFI05 716) copia- type pol polypr otein [Zea mays]
163157	ATU025 097	ATL8C1 5981:2 9..332 1	nap					ATL8C1 5981:2 9..332 1	0.63	g43887 28	100	355	2.6e- 32	(AC006 413) putati ve grl- like protei n [Arabi dopsis thalia na]
163158	ATU025 098	ATL8C2 3017:1 ..3196	nap					ATL8C2 3017:5 9..319 6	0.62	g40380 66, g33778 34	100, 30	771, 313	5.0e- 32, 3.0e- 13	(AC005 897) hypoth etical protei n [Arabi dopsis

163159	ATU025 099	ATL8C1 16:77. .1618	nap				ATL8C1 16:77. .1618	0.62	g21046 85	100	553			thalia nal; (AF075 598) No defini tion line found [Arabi dopsis thalia nal]
163160	ATU025 100	ATL8C2 5181:7 71..16 26	nap				ATL8C2 5181:1 432..1 200	0.62	g29824 57	100	326	2.2e- 32		(X9790 9) transc riptei on factor [Vicia fabal] (AL022 223) hypoth etical protei n [Arabi dopsis thalia nal]
163161	ATU025 101	ATL8C4 4382:7 243..1 0647	nap				ATL8C4 4382:7 243..1 0641	0.62	g45811 64	100	1628	4.2e- 172		(AC006 220) putati ve polypr oteins [Arabi dopsis thalia nal]

163162	ATU025 102	ATL8C2 2303:1 0353.. 11369	nap				ATL8C2 2303:1 0353.. 11369	0.62		g45593 62	100	1169	1.1e- 113	na] (AC006 585) hypoth etical protei n [Arabi dopsis thalia na]
163163	ATU025 103	ATL8C1 248:49 65..13 25	nap				ATL8C1 248:49 65..13 25	0.62		g44328 03	100	1565	3.0e- 133	(AC006 437) putati ve PttA2 protei n [Arabi dopsis thalia na]
163164	ATU025 104	ATL8C2 4139:2 415..1 109	nap				ATL8C2 4139:2 415..1 207	0.62		g18711 94	100	676	3.3e- 56	(U9043 9) DNA bindin g protei n isolog [Arabi dopsis thalia na]
163165	ATU025 105	ATL8C4 1006:1 22..53 40	nap				ATL8C4 1006:1 22..53 03	0.62		g45876 06, g45593 64	100, 99	831, 416	1.5e- 63, 5.5e- 30	(AC006 951) putati ve antise nse basic

163166	ATU025 106	ATL8C9 632:21 42..41 64	nap						0.62	g42622 13	100	961	5.9e- 94	fibrob last growth factor [Arabi dopsis thalia na]; (AC006 585) unknow n protei n [Arabi dopsis thalia na]
163167	ATU025 107	ATL8C1 7335:5 31..28 61	nap						0.62	g47739 18	100	1928	1.1e- 126	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
163168	ATU025	ATL8C1	nap						0.61	g40380	100	641	2.1e-	(AC005

108	250:19 570:..1 6166					250:19 312:..1 6166	66	48	897)		
163169	ATU025 109	ATL8C3 8607:5 34:..18 01	nap			ATL8C3 8607:5 34:..17 75	g31422 93	100	1887	9.6e- 187	(AC002 411) Contai ns simila rity to myosin IB heavy. chain gb X70 400 from Gallus gallus . [Arabi dopsis thalia na]
163170	ATU025 110	ATL8C4 1812:9 1:..273 9	nap			ATL8C4 1812:9 1:..273 9	g32427 11	100	2867	2.4e- 235	(AC003 040) hypoth etical protei n [Arabi dopsis thalia na]

163171	ATU025 111	ATL8C9 054:28 02..94 24	nap				ATL8C9 054:28 02..78 70, ATL8C9 054:83 87..91 74	0.61, 0.75	g28322 45, g62969 3, g44173 09	100, 100, 95	214, 373, 3045		(AF031 569) hypoth etical protei n [Zea mays]; probab le integr ase - common tobacc o (fragm ent) [Nicot iana tabacu m]; (AC006 446) putati ve pol ypr otei n with a revers e transc riptas e domain [Arabi dopsis thalia na]
163172	ATU025 112	ATL8C1 814:36	nap				ATL8C1 814:60	0.61	g43097 03	100	967	1.8e- 78	(AC006 266)

163173	ATU025 113	5..131 4	nap				9..131 4	0.61	g46801 80	100	2423	2.4e- 219	putative transposon protein [Arabidopsis thaliana]
163174	ATU025 114	ATL8C4 5463:2 11..31 12	nap				ATL8C4 5463:2 11..31 12	0.61	g41853 10	100	2789	1.3e- 267	(AF111709) polyprotein [Oryza sativa subsp. indica]
163175	ATU025 115	ATL8C3 108:18 9..235 0	nap				ATL8C3 108:18 9..235 0	0.61	g32527 92	100	594	4.7e- 60	(AF090446) gag protein [Zea mays]
163176	ATU025	ATL8C4 0531:3 4..116 6	nap				ATL8C4 0531:5 2..988	0.61	g22449	100	1733	1.1e-	(AB015609) S-adenosylmethionine decarboxylase [Nicotiana sylvestris]
													(Z9734)

	116	251:28 99..41 73							251:30 71..41 73	66				144	0) unname d protei n produc t [Arabi dopsis thalia na]
163177	ATU025 117	ATL8C4 9534:3 898..1	nap						ATL8C4 9534:3 898..1 53	g46894 79	100	197	2.9e- 21	(AC007 213) hypoth etical protei n [Arabi dopsis thalia na]	
163178	ATU025 118	ATL8C4 7089:2 01..12 07	nap						ATL8C4 7089:2 01..10 58	g45824 55	100	719	3.0e- 74	(AC007 071) putati ve recept or protei n kinase [Arabi dopsis thalia na]	
163179	ATU025 119	ATL8C1 4501:6 057..1 699	nap						ATL8C1 4501:6 057..1 757	g33778 16, g42636 53	100, 43	3930, 190	0.0, 1.5e- 11	(AF076 275) contai ns simila rity	

163181	ATU025 121	ATL8C3 0926:2 571..1 45	nap						ATL8C3 0926:2 331..2 47	0.61	g45843 54	100	1219	4.5e- 89	proteol n [Arabi dopsis thalia na]; (AC006 217) hypoth etical protei n [Arabi dopsis thalia na] (AC006 420) putati ve PttA- like transp oson protei n [Arabi dopsis thalia na]
163182	ATU025 122	ATL8C1 4056:6 26..21 85	nap						ATL8C1 4056:6 26..21 85	0.61	g38602 63	100	882	1.0e- 87	(AC005 824) putati ve cytoch rome p450 protei n [Arabi

163183	ATU025 123	ATL8C2 9658:1 338..1 50	nap					ATL8C2 9658:1 285..1 50	0.61	g35229 62	100	262	2.6e- 26	dopsis thalia nal (AC004 411) unknow n protei n [Arabi dopsis thalia nal]
163184	ATU025 124	ATL8C4 4613:1 46..11 59	nap					ATL8C4 4613:1 46..34 3	0.61	g45444 60	100	1066	2.7e- 104	(AC006 592) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
163185	ATU025 125	ATL8C4 1772:7 588..3 107	nap					ATL8C4 1772:7 588..3 128	0.60	g41857 40, g23885 77	100, 37	2109, 756	1.3e- 213, 3.1e- 209	(AF079 999) putati ve, glutam ate recept or [Arabi dopsis thalia nal]; (AC000 098)

163188	ATU025 128	ATL8C2 7666:9 943..9 82	nap						0.60	947340 13, 945586 86	100, 100	4274, 2325		thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
														(AC007 112) putati ve TNP1 of the Taml transp oson [Arabi dopsis thalia na]; (AC006 586) putati ve TNP2 protei n of the Taml transp oson of Antirr hinum majus

163189	ATU025 129	ATL8C2 2983:9 19..32 91	nap					ATL8C2 2983:1 241..3 143	0.60	g42042 72	100	2218	6.4e- 220	[Arabi dopsis thalia na] (AC005 223) Hypoth etical protei n [Arabi dopsis thalia na]
163190	ATU025 130	ATL8C2 014:10 62..10 9	nap					ATL8C2 014:94 0..145	0.60	g35401 90	100	423	2.1e- 40	(AC004 122) Hypoth etical protei n [Arabi dopsis thalia na]
163191	ATU025 131	ATL8C3 3495:7 3..198 0	nap					ATL8C3 3495:7 3..198 0	0.60	g43097 03	100	1065	9.9e- 93	(AC006 266) putati ve transp oson protei n [Arabi dopsis thalia na]
163192	ATU025 132	ATL8C1 1423:4 7..141 5	nap					ATL8C1 1423:3 47..13 83	0.60	g44553 00	100	1478	2.3e- 131	(AL035 528) putati ve

163193	ATU025 133	ATL8C3 7152:2 531..1 300	nap						ATL8C3 7152:2 451..1 300	0.60	g36084 12	100	683			pectate lyase All (fragment) [Arabidopsis thaliana]
163194	ATU025 134	ATL8C2 27:276 ..5688	nap						ATL8C2 27:276 ..1840 , ATL8C2 27:398 4..533 1	0.60, 0.52	g45860 66, g40380 66, g33778 16	100, 55, 35	3171, 339, 434	0.0, 2.1e- 31, 4.0e- 43		(AC006 194) putative polyprotein, 3', partial [Arabidopsis thaliana]; (AC005 897) hypothetical

163197	ATU025 137	ATL8C4 2410:1 356..1 43	nap						ATL8C4 2410:1 356..3 71	0.60	g46782 10	100	509	1.2e- 46	dopsis thalia na] (AC007 134) hypoth etical protei n [Arabi dopsis thalia na]
163198	ATU025 138	ATL8C1 414:57 ..3274	nap						ATL8C1 414:57 ..2888	0.60	g42630 63	100	1913	2.8e- 147	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
163199	ATU025 139	ATL8C3 6624:2 975..2 70	nap						ATL8C3 6624:2 276..2 70	0.60	g41153 61	100	648	4.9e- 60	(AC005 957) hypoth etical protei n [Arabi dopsis thalia na]
163200	ATU025 140	ATL8C4 4742:3 021..3 40	nap						ATL8C4 4742:3 021..4 03	0.60	g43888 21	100	1639	1.1e- 175	(AC006 528) putati ve mudrA transp osase

163201	ATU025 141	ATL8C3 4020:7 171..3 911	nap					ATL8C3 4020:7 073..3 911	0.60	g30803 58, g30803 59	100, 99	1142, 445	6.4e- 106, 1.8e- 19	protein [Arabi dopsis thalia na] (AL022 580) hypoth etical protein [Arabi dopsis thalia na]; (AL022 580) hypoth etical protein [Arabi dopsis thalia na]
163202	ATU025 142	ATL8C1 9555:3 463..2 54	nap					ATL8C1 9555:3 463..6 67	0.60	g44553 16	100	1345	4.9e- 70	(AL035 528) putati ve protein [Arabi dopsis thalia na] (AL030 978) putati ve
163203	ATU025 143	ATL8C2 7388:9 40..34 40	nap					ATL8C2 7388:1 729..3 421	0.60	g32692 93, g41159 21	100, 38	478, 503		(AL030 978) putati ve

163204	ATU025 144	ATL8C3 4955:8 57..23 68	nap						0.60	g25418 76	100	943	2.8e- 98	(D2601 5) CND41, chloro plast nucleo id DNA bindin g protei n [Nicot iana tabacu m]	protei n [Arabi dopsis thalia na]; (AF118 222) F3H7.4 gene produc t [Arabi dopsis thalia na]
163205	ATU025 145	ATL8C1 7049:1 26..15 85	nap						0.60	g43097 03	100	1230	5.3e- 123	(AC006 266) putati ve. transp oson protei n [Arabi	protei n [Arabi dopsis thalia na]; (AF118 222) F3H7.4 gene produc t [Arabi dopsis thalia na]

163209	ATU025 149	ATL8C4 9724:1 0125.. 17554	nap	ATL8C4 9724:1 0125.. 17554	0.59	g43253 51, g43097 03, g42622 10	100, 100, 100	3894, 1193, 1739	0.0, 6.1e- 114, 2.4e- 170	(AF128 394) simila r to Antirr hinum majus (garde n snapd agon) TNP2 protei n (GB:X5 7297) [Arabi dopsis thalia na]; (AC006 266) putati ve transp oson protei n [Arabi dopsis thalia
--------	---------------	-------------------------------------	-----	-------------------------------------	------	--	---------------------	------------------------	---------------------------------------	--

163210	ATU025 150	ATL8C2 7255:1 85..11 32	nap						ATL8C2 7255:5 64..11 32	0.59	g32528 10	100	1056			na]: (AC006 161) simila r to leucin e zipper transc riptio n factor [Arabi dopsis thalia na]
163211	ATU025 151	ATL8C9 071:26 8..148 4	nap						ATL8C9 071:26 8..137 7	0.58	g13506 80	100	1718			60S RIBOSO MAL PROTEI N L1 []
163212	ATU025 152	ATL8C1 6616:1 490..5 481	nap						ATL8C1 6616:1 490..5 481	0.58	g30803 75, g17303 28	100, 100	931, 707	1.3e- 99, 5.9e- 56		(AL022 580) putati ve protei n [Arabi dopsis

163217	ATU025 157	ATL8C3 1891:1 ..5371	nap				ATL8C3 1891:1 159..5 210	0.57	g40380 66, g33193 60	100, 61	729, 1867	1.5e- 42, 7.1e- 107	na] (AC005 897) hypoth etical protei n [Arabi dopsis thalia na]; (AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
163218	ATU025 158	ATL8C4 6073:3 788..5 29	nap				ATL8C4 6073:3 788..5 29	0.57	g45824 55	100	392	2.1e- 41	(AC007 071) putati ve recept or protei n

163219	ATU025 159	ATL8C3 4227:1 012..5 231	nap					ATL8C3 4227:1 012..5 231	0.57	g44163 01	100	3814	0.0	kinase [Arabi dopsis thalia na] (AF105 716) gag protei n [Zea mays]
163220	ATU025 160	ATL8C1 2846:1 627..3 501	nap					ATL8C1 2846:1 627..3 501	0.57	g45672 96	100	2305	8.5e- 209	(AC006 918) putati ve Athila retroee lement ORF1 protei n [Arabi dopsis thalia na]
163221	ATU025 161	ATL8C2 1190:4 795..7 528	nap					ATL8C2 1190:4 966..7 528	0.57	g42638 30	100	2822	3.0e- 210	(AC006 067) hypoth etical protei n [Arabi dopsis thalia na]
163222	ATU025 162	ATL8C1 7674:2 43..39 84	nap					ATL8C1 7674:2 43..36 66	0.57	g45811 64	100	1827	6.1e- 179	(AC006 220) putati ve

163223	ATU025 163	ATL8C1 0307:1 815..6 559	nap				ATL8C1 0307:3 606..6 520	0.57	g45811 64, g33778 30	100, 40	1676, 567			polypr otein [Arabi dopsis thalia na] (AC006 220) putati ve polypr otein [Arabi dopsis thalia na]; (AF075 598) contai ns simila rity to Aplysi a califo rnica interm ediate filame nt protei n A (GB:X6 0297) [Arabi dopsis thalia na] (AF128
163224	ATU025	ATL8C1	nap				ATL8C1	0.56	g43253	100	3851	0.0		(AF128

164	4776:5 003..1 136	4776:4 604..1 136	51	100	948	2.7e-74	(AC005508) 12894 [Arabi dopsis thalia na]				
163225	ATU025 165	ATL8C4 2833:1 8..832	nap	ATL8C3 2751:7 989..1 1447	ATL8C4 2833:6 05..832	0.56	g4262175	100	2021, 693, 264	1.8e-170, 6.6e-177, 2.6e-36	(AF096372) No defini tion line found [Arabi dopsis thalia na]; (AC006085) Hypoth
163226	ATU025 166	ATL8C3 2751:7 989..1 1447	nap	ATL8C3 2751:7 989..1 1177	ATL8C4 2833:6 05..832	0.56	g3695397, g4836930, g4417308	100, 50, 42	2021, 693, 264	1.8e-170, 6.6e-177, 2.6e-36	(AF096372) No defini tion line found [Arabi dopsis thalia na]; (AC006085) Hypoth

163232	ATU025 172	ATL8C2 3878:2 51..16 48	nap						ATL8C2 3878:2 51..16 16	0.56	g15466 88	100	1027	8.4e- 88	thalia nal; (AF147 259) No defini tion line found [Arabi dopsis thalia nal] (X9880 2) peroxi dase ATP11a [Arabi dopsis thalia nal]
163233	ATU025 173	ATL8C3 0623:3 352..1 229	nap						ATL8C3 0623:3 352..1 403	0.56	g40637 41	100	937	6.2e- 103	(AC005 851) putati ve Na/H antipo rter [Arabi dopsis thalia nal]
163234	ATU025 174	ATL8C1 0314:1 ..2514	nap						ATL8C1 0314:8 2..222 2	0.56	g40380 66, g44173 09	100, 45	616, 1572		(AC005 897) hypo thetical protein [Arabi

163238	ATU025 178	ATL8C3 3430:4 819..7 91	nap					ATL8C3 3430:4 819..7 91	0.55	g46783 56	100	2156	2.2e- 200	n [Arabi dopsis thalia na] (AL049 659) cytoch rome P450- like protei n [Arabi dopsis thalia na]
163239	ATU025 179	ATL8C4 4776:4 623..4 98	nap					ATL8C4 4776:4 623..5 31	0.55	g32362 53	100	1255	3.1e- 138	(AC004 684) recept or- like protei n kinase [Arabi dopsis thalia na]
163240	ATU025 180	ATL8C2 5202:4 198..1	nap					ATL8C2 5202:4 198..1 371	0.55	g33778 16, g48951 68	100, 50	3300, 229	0.0, 3.2e- 12	(AF076 275) contai ns simila rity to Arabid opsis thalia na

163243	ATU025 183	ATL8C2 8274:1 983..1 391	nap						ATL8C2 8274:1 950..1 391	0.55	g29824 45	100	296	1.0e- 31	thalia nal; (AC007 071) hypoth etical protei n [Arabi dopsis thalia nal] (AL022 224) putati ve protei n [Arabi dopsis thalia nal]
163244	ATU025 184	ATL8C3 3387:1 593..2 24	nap						ATL8C3 3387:1 593..2 28	0.55	g46462 26	100	1102	2.2e- 104	(AC007 235) hypoth etical protei n [Arabi dopsis thalia nal]
163245	ATU025 185	ATL8C4 063:12 596..4 559	nap						ATL8C4 063:12 596..4 559	0.55	g40380 66, g47739 10, g45570 68	100, 83, 63	746, 347, 1333	1.7e- 36, 2.9e- 31, 2.8e- 188	(AC005 897) hypoth etical protei n [Arabi dopsis thalia nal]

163248	ATU025 188	ATL8C1 4776:4 900..9 800	nap			ATL8C1 4776:4 900..9 800	0.54	g33193 60	100	3321	0.0	(AF077 408) contad ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
163249	ATU025 189	ATL8C4 0619:2 161..6 30	nap			ATL8C4 0619:2 161..7 10	0.54	g33425 56	100	1836	5.6e- 184	(AF077 528) import in alpha [Arabi dopsis thalia na]
163250	ATU025 190	ATL8C3 367:37 06..38 6	nap			ATL8C3 367:36 97..38 6	0.54	g27390 04, g31767 05	100, 99	939, 214	1.1e- 99, 7.6e- 11	(AF022 461) CYP82C 1p [Glyci ne max]; (AC002 392) hypoth

163251	ATU025 191	ATL8C1 4340:2 140..6 12	nap						ATL8C1 4340:2 140..6 12	0.54	g31526 00	100	702	2.5e- 72	etical protei n [Arabi dopsis thalia na] (AC002 986) Contai ns simila rity to S. cerevi siae hypo thetical protei n YOR197 w, gb Z75 105. ESTs gb H37 409, gb AA3 95290, and gb T43 907 come from this gene. [Arabi dopsis thalia na]
--------	---------------	----------------------------------	-----	--	--	--	--	--	----------------------------------	------	--------------	-----	-----	-------------	--

163256	ATU025 196	ATL8C5 0080:4 12..14 61	nap					ATL8C5 0080:4 12..14 61	0.54	g45824 55	100	410	1.5e- 35	(AC007 071) putati ve recept or protei n kinase [Arabi dopsis thalia na]
163257	ATU025 197	ATL8C4 6653:1 904..2 63	nap					ATL8C4 6653:1 832..2 63	0.54	g47339 67	100	870	1.3e- 81	(AC007 261) envelo pe- like protie n [Arabi dopsis thalia na]
163258	ATU025 198	ATL8C1 5874:4 390..9 50	nap					ATL8C1 5874:4 390..9 53	0.54	g41153 83	100	1595	5.3e- 171	(AC005 967) recept or- like protei n kinase [Arabi

163259	ATU025 199	ATL8C1 0807:2 850..1	nap					ATL8C1 0807:2 850..9 5	0.54	g33193 67, g30467 04	100, 39	873, 1279	2.2e- 38, 1.4e- 121	dopsis thalia nal (AF077 409) No defini tion line found [Arabi dopsis thalia nal; (AL022 223) putati ve protei n [Arabi dopsis thalia nal (AC005 825) putati ve revers e transc riptas e [Arabi dopsis thalia nal; (AC002 510) putati
163260	ATU025 200	ATL8C1 3901:1 57..59 38	nap					ATL8C1 3901:1 57..59 38	0.53	g45811 11, g26186 94	100, 100	4898, 1352	0.0, 1.2e- 129	(AC005 825) putati ve revers e transc riptas e [Arabi dopsis thalia nal; (AC002 510) putati

163261	ATU025 201	ATL8C3 2887:2 50..16 43	nap						0.53	ATL8C3 2887:2 50..16 43		g46894 52	100	713	1.3e- 67	ve zinc- finger protei n [Arabi dopsis thalia na] (AC006 267) putati ve transp oson protei n [Arabi dopsis thalia na]
163262	ATU025 202	ATL8C2 9990:1 016..3 009	nap						0.53	ATL8C2 9990:1 016..2 860		g38106 01, g48951 65	100, 53	1222, 660	1.4e- 123, 1.7e- 32	(AC005 398) hypo thetical protei n [Arabi dopsis thalia na]; (AC007 231) unknow n protei n [Arabi dopsis thalia

163263	ATU025 203	ATL8C1 8971:1 092...3 7	nap				ATL8C1 8971:1 092...3 7	0.53	g26606 76	100	1189	3.8e- 113	na] (AC002 342) Dreg-2 like protei n [Arabi dopsis thalia na]
163264	ATU025 204	ATL8C3 2118:3 035...6 38	nap				ATL8C3 2118:3 035...6 38	0.53	g49143 36	100	991	1.9e- 96	(AC005 489) F14N23 .22 [Arabi dopsis thalia na]
163265	ATU025 205	ATL8C2 067:23 04...30 3	nap				ATL8C2 067:20 38...41 1	0.53	g43253 48	100	1807	1.0e- 153	(AF128 394) contai ns simila rity to phosph ate transp orters [Arabi dopsis thalia na]
163266	ATU025 206	ATL8C7 706:37 63...30 94	nap				ATL8C7 706:35 90...32 46	0.53	g40380 66	100	669	4.2e- 28	(AC005 897) hypoth etical protei n

163267	ATU025 207	ATL8C4 6149:1 7911.. 12828	nap				ATL8C4 6149:1 7859.. 12971	0.53	g40380 66, g33193 60	100, 59	499, 2146	1.1e- 27, 4.8e- 177	[Arabi dopsis thalia na] (AC005 897) hypoth etical protei n [Arabi dopsis thalia na]; (AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
163268	ATU025 208	ATL8C4 5395:3 92..29 08	nap				ATL8C4 5395:1 448..2 695	0.52	g28530 91, g32506 74	100, 88	217, 283	7.2e- 20, 3.9e- 31	(AL021 768) hypoth etical protei

163269	ATU025 209	ATL8C1 220:16 3..213 7	nap						ATL8C1 220:16 3..195 6	0.52	g40380 66	100	779	1.7e- 51	n [Arabi dopsis thalia na]; (AL024 486) putati ve protei n [Arabi dopsis thalia na]
163270	ATU025 210	ATL8C3 9688:6 014..2 466	nap						ATL8C3 9688:5 358..2 466	0.52	g44327 95, g44327 94	100, 64	927, 2903	1.0e- 47, 0.0	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
															(AC006 437) putati ve protei n 2 of of the En/Spm transp osable elemen t system of Zea mays

163271	ATU025 211	ATL8C1 2145:9 9..472 9	nap						ATL8C1 2145:9 9..472 9	0.52	g46801 80	100	2295	4.1e- 193	[Arabi dopsis thalia nal; (AC006 437) putati ve Tnp2 Taml transp oson protei n [Arabi dopsis thalia nal]
163272	ATU025 212	ATL8C1 3033:1 434..2 646	nap						ATL8C1 3033:1 434..2 064	0.52	g13635 28	100	1689	8.8e- 139	gag protei n - maize [Zea mays]
163273	ATU025 213	ATL8C4 023:70 20..12 35	nap						ATL8C4 023:70 20..42 69	0.52	g47739 10	100	633	5.5e- 43	[AF147 259) No defini tion line found

163274	ATU025 214	ATL8C3 7158:2 8..972	nap				ATL8C3 7158:2 8..690	0.51	g45875 23	100	1103	[Arabi dopsis thalia na] (AC007 060) T5i8.1 2 [Arabi dopsis thalia na]
163275	ATU025 215	ATL8C3 7374:1 597..2 60	nap				ATL8C3 7374:1 597..3 23	0.51	g45389 21	100	646	(AL049 483) putati ve protei n [Arabi dopsis thalia na]
163276	ATU025 216	ATL8C7 180:19 6..155 6	nap				ATL8C7 180:85 3..155 6	0.51	g42621 75	100	857	(AC005 508) 12894 [Arabi dopsis thalia na]
163277	ATU025 217	ATL8C3 3349:1 810..1	nap				ATL8C3 3349:1 810..3 7	0.51	g45859 33, g38105 96	100, 54	514, 251	(AC007 211) hypoth etical protei n [Arabi dopsis thalia na]; (AC005

163278	ATU025 218	ATL8C1 4096:6 588..4 72	nap				ATL8C1 4096:6 588..1 496	0.51	g46781 97, g35598 05	100, 68	5777, 827	0.0, 6.1e- 80	398) revers e- transc riptas e-like protei n [Arabi dopsis thalia na]
163279	ATU025	ATL8C1	nap				ATL8C1	0.51	g46782	100	518		(AC007 134) simila r to retrov iral aspart yl protea ses [Arabi dopsis thalia na]; (AJ006 787) putati ve phytoc helati n synthe tase [Arabi dopsis thalia na]
													(AC007

163280	219	7887:6 87..15 83					7887:6 87..15 83	10					134) hypoth etical protei n [Arabi dopsis thalia na]
163281	ATU025 220	ATL8C2 411:1 808..2	nap				ATL8C2 411:1 808..9	0.51	945860 36	100	817	1.1e- 87	(AC007 109) hypoth etical protei n [Arabi dopsis thalia na]
163282	ATU025 221	ATL8C9 955:49 56..41 26	nap				ATL8C9 955:49 53..41 32	0.51	g44687 94	100	456	2.3e- 43	(AJ010 296) Glutat hione transf erase III (b) [Zea mays]
163283	ATU025 222	ATL8C3 7663:1 17..13 01	nap				ATL8C3 7663:1 20..12 33	0.51	g45899 54	100	439	2.9e- 52	(AC007 169) hypoth etical protei n [Arabi dopsis thalia na]
	ATU025 223	ATL8C4 1976:7	nap				ATL8C4 1976:7	0.50	g40380 66,	100, 71, 40	724, 1237,	3.9e- 39,	(AC005 897)

163284	ATU025 224	ATL8C1 0246:1 380..4 07	nap				315..3 602	g44173 09, g33778 34	725	2.0e- 170, 3.7e- 35	hypothetical protein [Arabidopsis thaliana]; (AC006446) putative polypeptide with a reverse transcriptase domain [Arabidopsis thaliana]; (AF075598) No definition line found [Arabidopsis thaliana]
		ATL8C1 0246:1 340..4 07							844	6.4e- 90	(AC002333) endochitinase

163285	ATU025 225	ATL8C1 0395:1 059..3 16	nap					ATL8C1 0395:1 026..4 42	0.50	g29247 82	100	1162		e isolog [Arabi dopsis thalia na]
163286	ATU025 226	ATL8C9 821:32 06..72 6	nap					ATL8C9 821:32 06..72 6	0.50	g38343 19	100	945	1.3e- 100	(AC002 334) hypo thetical protein [Arabi dopsis thalia na]
163287	ATU025 227	ATL8C2 1328:1 489..3 47	nap					ATL8C2 1328:1 489..5 71	0.50	g27087 51	100	619	2.2e- 66	(AC003 952) hypo thetical protein [Arabi dopsis thalia na]
163288	ATU025 228	ATL8C1 4031:8 558..3 895	nap					ATL8C1 4031:4 953..3 951	0.50	g42636 58, g49143 61	100, 100	2297, 802	4.9e- 225, 6.8e- 89	(AC006 136) hypo thetical protein

163289	ATU025 229	ATL8C1 7220:2 71..93 8	nap					ATL8C1 7220:3 20..78 8	0.50	g40380 66	100	687	3.5e- 49	[Arabi dopsis thalia nal; (AC007 289) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
163290	ATU025 230	ATL8C3 0823:8 33..13 0	nap					ATL8C3 0823:5 12..13 0	0.49	g45126 92	100	431	7.1e- 36	(AC006 569) hypoth etical protei n [Arabi dopsis thalia nal]
163291	ATU025 231	ATL8C1 6700:2 07..38	nap					ATL8C1 6700:2 07..38	0.49	g45860 66	100	2289	2.5e- 243	(AC006 194) putati

		81						81									ve pol polypr otein, 3', partia l [Arabi dopsis thalia na]
163292	ATU025 232	ATL8C1 433:1 0..180 0	nap					ATL8C1 433:1 14..12 95	0.49	g41641 41	100	795	1.1e- 84	(AB012 203) gibber elin 20- oxidas e [Lactu ca sativa]			
163293	ATU025 233	ATL8C1 9195:1 560..6 983	nap					ATL8C1 9195:1 560..6 858	0.49	g36953 97, g44173 09	100, 44	1839, 751	3.2e- 184, 5.8e- 101	(AF096 372) No defini tion line found [Arabi dopsis thalia na]; (AC006 446) putati ve pol polypr otein with a revers			

163294	ATU025 234	ATL8C1 4763:9 ..3206	nap					ATL8C1 4763:9 ..3206	0.49	g40380 66	100	766	1.1e- 35	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
163295	ATU025 235	ATL8C4 5709:1 558..1 45	nap					ATL8C4 5709:1 558..1 068	0.49	g46894 52	100	755	5.7e- 71	(AC006 267) putati ve transp oson protei n [Arabi dopsis thalia na]
163296	ATU025 236	ATL8C1 0345:1 68..18 11	nap					ATL8C1 0345:1 68..18 11	0.49	g45861 19	100	423	2.5e- 44	(AL049 638) putati ve protei n [Arabi dopsis thalia na]

163298	ATU025 238	ATL8C3 443:1. .3808	nap				ATL8C3 443:50 4..380 8	0.49		g29824 44, g83695 4	100, 32	912, 128	3.0e- 105, 4.2e- 08	na] (AL022 224) CLV1 recept or kinase like protei n [Arabi dopsis thalia na]; (U2094 8) recept or protei n kinase [Ipomo ea trifid a]
163299	ATU025 239	ATL8C6 51:726 4..334 4	nap				ATL8C6 51:669 6..334 4	0.49		g43253 48, g30470 73	100, 53	1436, 1126	9.0e- 89, 3.4e- 59	(AF128 394) contai ns simila rity to phosph ate transp orters [Arabi dopsis thalia na];

163300	ATU025 240	ATL8C1 4031:3 25..28 91	nap						ATL8C1 4031:3 87..22 86	0.49	g32362 53	100	1287	6.8e- 138	(AF058 825) contai ns simila rity to retrot ranspo son- like protei ns [Arabi dopsis thalia na]
163301	ATU025 241	ATL8C3 7409:1 525..5 1	nap						ATL8C3 7409:1 187..5 1	0.49	g14029 18	100	969		(X9832 0) peroxi dase [Arabi dopsis thalia na]
163302	ATU025 242	ATL8C1 419:23 8..253	nap						ATL8C1 419:18 92..14	0.49	g48862 86	100	365	2.8e- 29	(AL050 300) putati

163303	ATU025 243	ATL8C9 287:23 43..26 5	nap						50					100	1433		ve protei n [Arabi dopsis thalia na]
									ATL8C9 287:23 43..26 5	0.48	g22449 16						(Z9733 9) hypo thetical protei n [Arabi dopsis thalia na]
163304	ATU025 244	ATL8C1 061:1. .3593	nap						ATL8C1 061:55 ..3414	0.48	g40380 66, g33193 60			100, 30	614, 1497	3.6e- 20, 2.3e- 118	(AC005 897) hypo thetical protei n [Arabi dopsis thalia na]; (AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like

163305	ATU025 245	ATL8C4 3187:4 622..2 924	nap					ATL8C4 3187:4 584..3 223	0.48			g40380 66, g47739 10	100, 66	790, 366	1.3e- 47, 2.0e- 24	gene (GB:AB 007467) [Arabi dopsis thalia na]
																(AC005 897) hypo thetical protein [Arabi dopsis thalia na]; (AF147 259) No defini tion line found [Arabi dopsis thalia na]
163306	ATU025 246	ATL8C5 223:16 4..213 2	nap					ATL8C5 223:16 4..442	0.48			g27393 87	100	249	2.6e- 15	(AC002 505) hypo thetical protein [Arabi dopsis thalia na]
163307	ATU025	ATL8C3	nap					ATL8C3	0.48			g33373	100	1773	1.1e-	(AC004

	247	4823:2 582..6 241					4823:2 582..6 241		67			155	481) hypoth etical protei n [Arabi dopsis thalia nal]
163308	ATU025 248	ATL8C3 3168:1 03..28 85	nap				ATL8C3 3168:1 03..28 85	0.48	g13635 28, g22244	100, 99	1755, 148	4.7e- 139, 0.0001 3	gag protei n - maize [Zea mays]; (X0026 3) uniden tified readin g frame [Zea mays]
163309	ATU025 249	ATL8C4 3267:3 81..14 92	nap				ATL8C4 3267:3 81..14 92	0.48	g47339 67	100	1263	2.1e- 102	(AC007 261) envelo pe- like protie n [Arabi dopsis thalia nal]
163310	ATU025 250	ATL8C3 5762:5 323..6 5	nap				ATL8C3 5762:4 430..6 5	0.47	g42189 91	100	1972	1.1e- 194	(AF098 632) subtil isin- like

[illegible]

[illegible]

163323	ATU025 263	ATL8C1 36:221 9..137 0	nap					ATL8C1 36:221 9..137 0	0.45	g48951 89	100	244			e) [Arabi dopsis thalia na]; (AL021 636) hypoth etical protei n [Arabi dopsis thalia na]
163324	ATU025 264	ATL8C2 0680:4 91..24 79	nap					ATL8C2 0680:5 03..23 84	0.45	g38596 00	100	1078	2.9e- 119		(AF104 919) T15B16 .6 gene produc t [Arabi dopsis thalia na]
163325	ATU025 265	ATL8C4 9154:6 47..26 21	nap					ATL8C4 9154:6 47..23 85	0.45	g13703 5	100	413	1.1e- 37		URACIL -DNA GLYCOS YLASE

163332	ATU025 272	ATL8C2 3733:8 19..22 11	nap				ATL8C2 3733:8 19..22 11	0.43	943887 18	100	1053	3.3e- 102	(AC006 413) putative Ty3- type polypr oteins, including integrase domain with DDE signature [Arabidopsis thaliana na]
163333	ATU025 273	ATL8C3 2751:7 476..5 035	nap				ATL8C3 2751:6 790..5 035	0.43	942630 63	100	2970	1.4e- 233	(AC005 142) hypothetical protein [Arabidopsis thaliana na]
163334	ATU025 274	ATL8C4 7020:2 446..1 501	nap				ATL8C4 7020:2 422..1 501	0.43	919463 31	100	909	9.6e- 90	(U6915 5) prohibitin [Arabidopsis thaliana na]

163335	ATU025 275	ATL8C1 1428:1 467..6 17	nap			ATL8C1 1428:1 317..6 26	0.43	g22752 14	100	356	2.8e- 29	(AC002 337) hypoth etical protei n [Arabi dopsis thalia na]
163336	ATU025 276	ATL8C1 9632:1 70..10 39	nap			ATL8C1 9632:1 70..10 39	0.43	g45860 54	100	707	3.1e- 48	(AC007 020) unknow n protei n [Arabi dopsis thalia na]
163337	ATU025 277	ATL8C1 0861:1 ..1487	nap			ATL8C1 0861:4 1..148 7	0.43	g47551 99	100	822	4.0e- 55	(AC007 018) hypoth etical protei n [Arabi dopsis thalia na]
163338	ATU025 278	ATL8C2 7923:3 214..2 0	nap			ATL8C2 7923:3 214..9 09	0.42	g45858 84	100	571		(AC005 850) Hypoth etical protei n [Arabi dopsis thalia na]

163339	ATU025 279	ATL8C7 239:27 1..229 5	nap				ATL8C7 239:27 1..229 5	0.42	g14183 31	100	1498	6.6e- 152	(X9590 9) recept or like protei n kinase [Arabi dopsis thalia nal]
163340	ATU025 280	ATL8C4 4131:2 480..9 60	nap				ATL8C4 4131:2 480..1 113	0.42	g40380 66	100	636	1.3e- 37	(AC005 897), hypoth etical protei n [Arabi dopsis thalia nal]
163341	ATU025 281	ATL8C2 9510:3 930..2 296	nap				ATL8C2 9510:3 930..2 302	0.42	g25641 12	100	1153	1.1e- 114	(AF000 371) UDP glucos e:flav onoid 3-o- glucos yltran sferas e [Vitis vinife ra]
163342	ATU025 282	ATL8C3 62:414 5..547	nap				ATL8C3 62:413 8..737	0.42	g38343 18	100	625	4.8e- 54	(AC005 679) Simila r to

163343	ATU025 283	ATL8C2 1196:1 5652.. 11711	nap					ATL8C2 1196:1 5577.. 11711	0.42	g43253 51	100	3640	0.0	[Arabi dopsis thalia na] (AF128 394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei n (GB:X5 7297) [Arabi dopsis thalia na]
163344	ATU025 284	ATL8C2 1176:1 8..438 0	nap					ATL8C2 1176:1 8..433 1	0.42	g36953 97, g44173 09	100, 62	1921, 1301	7.5e- 134, 7.6e- 132	(AF096 372) No defini tion line found [Arabi dopsis thalia na]; (AC006 446) putati ve pol ypr

163348	ATU025 288	1..350 6	nap				6..350 6	0.41	g38057 69	100	1875	2.5e- 175	polypr otein [Oryza sativa subsp. indica]
		ATL8C2 34:936 ..3065					ATL8C2 34:950 ..2834						(AC005 693) putati ve mudR- like transp oson [Arabi dopsis thalia na]
163349	ATU025 289	ATL8C1 1169:1 161..2 993	nap				ATL8C1 1169:1 161..2 654	0.41	g45672 96	100	2152	1.3e- 180	(AC006 918) putati ve Athila retroeo lement ORF1 protei n [Arabi dopsis thalia na]
163350	ATU025 290	ATL8C1 6347:1 307..2 55	nap				ATL8C1 6347:1 274..2 55	0.41	g43357 53	100	1610	6.4e- 161	(AC006 284) unknow n protei n [Arabi

163351	ATU025 291	ATL8C1 6632:2 14..27 62	nap				ATL8C1 6632:2 14..27 62	0.41	g17941 45	100	769	4.8e- 29	dopsis thalia nal (AB000 505) unname d protei n produc t [Daucu s carota]
163352	ATU025 292	ATL8C2 9092:1 ..2253	nap				ATL8C2 9092:1 981..2 236	0.41	g36680 81, g36954 13	100, 82	275, 126	1.2e- 31, 2.6e- 12	(AC004 667) putati ve peptid ase [Arabi dopsis thalia nal; (AF096 373) No defini tion line found [Arabi dopsis thalia nal]
163353	ATU025 293	ATL8C8 870:48 79..67 22	nap				ATL8C8 870:50 05..67 12	0.40	g32876 76, g22447 60	100, 33	1343, 516	5.6e- 125, 3.9e- 35	(AC003 979) Contai ns

163354	ATU025 294	ATL8C5 0168:1 654..8 360	nap							ATL8C5 0168:1 654..8 360	0.40	g44163 01, g45824 53	100, 41	3906, 300	0.0, 8.1e- 31	gene F... []; (Z9733 5) seleni um- bindin g protei n [Arabi dopsis thalia na]
163355	ATU025 295	ATL8C1 0666:4 413..5 53	nap							ATL8C1 0666:4 147..5 53	0.40	g45859 31, g44067 97	100, 40	3452, 574	(AC007 211) hypoth etical protei n [Arabi dopsis thalia na]	

163356	ATU025 296	ATL8C2 4819:2 28..33 45	nap						0.40	g36458 99	100	4913	0.0	thalia nal; (AC006 304) hypoth etical protein [Arabi dopsis thalia nal]
163357	ATU025 297	ATL8C5 0139:2 403..6 21	nap							g33954 30	100	347	3.9e- 31	(AC004 683) hypoth etical protein [Arabi dopsis thalia nal]
163358	ATU025 298	ATL8C1 556:16 7..350 0	nap							g31766 86	100	2696	1.9e- 263	(AC003 671) Simila r to high affini ty

163372	ATU025 312	ATL8C4 3291:5 751..4 429	nap								g34618 14	100	1681			protein [Arabi dopsis thalia na]
163373	ATU025 313	ATL8C3 3861:2 290..1 1837	nap								g42636 58	100	1280			(AC006 136) hypoth etical protein [Arabi dopsis thalia na]
163374	ATU025 314	ATL8C8 710:51 3..140 3	nap								g48368 99	100	1324	3.1e- 57	(AC007 369) Unknown protein [Arabi dopsis thalia na]	
163375	ATU025 315	ATL8C9 657:64 4..131 5	nap								g40380 66	100	769	5.8e- 58	(AC005 897) hypoth etical	

163376	ATU025 316	ATL8C4 090:28 91..69 4	nap								g16660 96	100	554	4.6e- 58	(Y0911 3) dioxyg enase [Marah macro arpus]	protei n [Arabi dopsis thalia na]
163377	ATU025 317	ATL8C2 4753:5 08..17 10	nap								g45811 24, g45899 54	100, 100	1258, 206	1.4e- 114, 4.1e- 28	(AC005 825) hypoth etical protei n [Arabi dopsis thalia na]; (AC007 169) hypoth etical protei n [Arabi dopsis thalia na]	protei n [Arabi dopsis thalia na]
163378	ATU025 318	ATL8C1 0247:1 853..6 64	nap								g45899 54	100	711		(AC007 169) hypoth etical protei n [Arabi dopsis thalia na]	protei n [Arabi dopsis thalia na]

163384 163385 163386
 163384 163385 163386
 163384 163385 163386

163384	ATU025 324	ATL8C1 1283:1 143..4 592	nap							g43253 66	100	4620	0.0	(AF128 396) simila r to maize transp oson MuDR- like protei ns [Arabi dopsis thalia na]
163385	ATU025 325	ATL8C4 7911:9 57..27 9	nap							g20585 04	100	448	1.8e- 36	(U7655 4) zinc- finger protei n-1 [Brass ica rapa]
163386	ATU025 326	ATL8C4 6947:1 394..2 7	nap							g42042 95, g41855 99	100, 100	267, 275	4.3e- 23, 4.0e- 25	(AC003 027) lcl pr t_seq No defini tion line found [Arabi dopsis thalia na]; (AB010 708) Anthoc

163390	ATU025 330	ATL8C2 7647:1 608..2 933	nap									g45393 95	100	1752		prote n [Arabi dopsis thalia nal (AL035 526) putati ve protei n [Arabi dopsis thalia nal (AC035 496) hypoth etical protei n [Arabi dopsis thalia nal (AC004 683) unknow n protei n [Arabi dopsis thalia nal (AF096 372) No defini
163391	ATU025 331	ATL8C5 0082:4 791..3 621	nap									g35823 22	100	1340	1.6e- 118	
163392	ATU025 332	ATL8C2 1405:1 311..6 66	nap									g33954 36	100	203	1.2e- 08	
163393	ATU025 333	ATL8C3 2388:5 415..3 634	nap									g36953 97	100	2022	3.7e- 202	

163394	ATU025 334	ATL8C6 984:18 42..10 60	nap							g13620 16	100	587	1.2e- 51	zinc finger protei n 3 - Arabid opsis thalia na [Arabi dopsis thalia na]
163395	ATU025 335	ATL8C1 0896:9 3..112 0	nap							g45859 24	100	655	2.2e- 70	(AC007 211) hypothe tical protei n [Arabi dopsis thalia na]
163396	ATU025 336	ATL8S2 1725:1 3..573	nap	ATL8S2 1725:1 3..382	1.00	g11731 72	99	363	1.4e- 32	RIBOSO ME RECYCL ING FACTOR (RIBOS OME RELEAS ING FACTOR)				

163397	ATU025 337	ATL8C4 8313:4 089..1 328	nap										g22448 64	100	2808	9.3e- 218	(Z9733 7) hypoth etical protei n [Arabi dopsis thalia nal]	(RRF) [Haemo philus influe ntiae Rd]
163398	ATU025 338	ATL8C3 8148:1 561..4 24	nap										g26186 92	100	761	2.5e- 86	(AC002 510) putati ve zinc- finger protei n [Arabi dopsis thalia nal]	(RRF) [Haemo philus influe ntiae Rd]
163399	ATU025 339	ATL8C1 637:33 37..22 37	nap										g44540 27	100	825	1.6e- 88	(AL035 394) putati ve protei n [Arabi dopsis thalia nal]	(RRF) [Haemo philus influe ntiae Rd]
163400	ATU025 340	ATL8C1 4727:5	nap										g44328 02	100	4393	0.0	(AC006 437)	(RRF) [Haemo philus influe ntiae Rd]

[illegible]

163404	ATU025 344	ATL8C1 7072:1 ..3631	nap						g13620 10, g22450 09	100, 49	1422, 616	1.5e- 144, 4.9e- 68	ubiqui tin- like protei n 9 - Arabid opsis thalia na []; (Z9734 1) hypoth etical protei n [Arabi dopsis thalia na]
163405	ATU025 345	ATL8C4 9487:3 58..15 57	nap						g41851 29	100	819	2.0e- 62	(AC005 724) unknow n protei n [Arabi dopsis thalia na]

163406	ATU025 346	ATL8C1 0977:1 33..14 53	nap							g41917 95	100	829	5.3e- 76	thalia nal (AC005 917) putati ve zinc finger -like protei n [Arabi dopsis thalia nal]
163407	ATU025 347	ATL8C2 217:30 61..11 48	nap							g42630 63	100	1883	4.6e- 173	(AC005 142) hypoth etical protei n [Arabi dopsis thalia nal]
163408	ATU025 348	ATL8C1 0270:2 007..1 95	nap							g36458 98	100	2502	(U6840 8) in- frame stop codon; possib ly a post- transp ositio n mutati on [Zea mays]	

163409	ATU025 349	ATL8C2 7021:3 36..15 43	nap						g48368 95	100	538	6.2e- 57	(AC007 369) Hypoth etical protei n [Arabi dopsis thalia na]
163410	ATU025 350	ATL8C4 4985:3 11..11 20	nap						g17550 66	100	309	2.9e- 25	(U6301 2) lectin precu sor [Sopho ra japoni cal]
163411	ATU025 351	ATL8C2 1154:1 5470.. 16128	nap						g40380 66	100	613	1.6e- 31	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
163412	ATU025 352	ATL8C8 464:14 92..26	nap						g21295 84	100	1185	1.1e- 105	finger protei n - Arabid opsis thalia na retrot ranspo son Tall-1

163421	ATU025 361	ATL8C3 7426:2 246..4 000	nap							g37859 80	100	2379		serine /threo nine protei n kinase [Arabi dopsis thalia nal]
163422	ATU025 362	ATL8C3 0046:3 669..4 380	nap							g44327 95	100	826	6.2e- 40	(AC005 560) hypoth etical protei n [Arabi dopsis thalia nal]
163423	ATU025	ATL8C2	nap							g43253	100	4055	0.0	(AC006 437) putati ve protei n 2 of of the En/Spm transp osable elemen t system of Zea mays [Arabi dopsis thalia nal]

163424	363	5202:6 204..8 771								51	100	466	4.4e-51	394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei n (GB:X5 7297) [Arabi dopsis thalia nal
	ATU025 364	ATL8C4 6796:1 653..4 23	nap							g45858 84				(AC005 850) Hypoth etical protei n [Arabi dopsis thalia nal
163425	ATU025 365	ATL8C4 5079:1 394..4 89	nap							g28530 85	100	1250	1.3e-77	(AL021 768) putati ve protei n [Arabi dopsis thalia nal
163426	ATU025	ATL8C5	nap							g28528	100	654	6.0e-	flavon

163427	366	006:27 52..17 75								6		100	1580	67	ol 4'- sulfot ransfe rase - Flaver ia chlora efolia [] (AF007 269) A IG00 2N01.2 7 gene produc t [Arabi dopsis thalia na]
	ATU025 367	ATL8C8 244:63 5..239 9	nap							g21911 42			1.0e- 168		
163428	ATU025 368	ATL8C3 1428:1 485..1 5	nap							g34136 98		100	1758	2.4e- 181	(AC004 747) hypoth etical protei n [Arabi dopsis thalia na]
163429	ATU025 369	ATL8C2 9472:1 758..2 470	nap							g44327 95		100	849	5.6e- 46	(AC006 437) putati ve protei n 2 of of the En/Spm transp osable

163433	ATU025 373	ATL8C8 543:13 94..29 9	nap						943372 08	100	931	4.0e- 91	(AC006 403) hypoth etical protei n [Arabi dopsis thalia na]
163434	ATU025 374	ATL8C1 6392:2 808..1 828	nap						933414 68	100	334	1.5e- 21	(AJ009 594) Dof zinc finger protei n [Nicot iana tabacu m]
163435	ATU025 375	ATL8C4 7563:1 854..5 03	nap						926424 51	100	2052	5.9e- 195	(AC002 391) putati ve indole -3- acetat e beta- glucos yltran sferas e [Arabi dopsis thalia na]
163436	ATU025 376	ATL8C1 1164:5	nap						935102 54	100	1338	9.8e- 126	(AC005 310)

	380	1515:1 568..2 55							97				12	8) putati ve protei n [Arabi dopsis thalia na]
163441	ATU025 381	ATL8C1 7210:1 626..8 22	nap						g21296 34	100	805	1.3e- 62	lectin -like protei n Arabid opsis thalia na [Arabi dopsis thalia na]	
163442	ATU025 382	ATL8C1 0313:1 291..6 47	nap						g40637 44	100	920		(AC005 851) hypoth etical protei n [Arabi dopsis thalia na]	
163443	ATU025 383	ATL8C1 9854:7 208..4 762	nap						g47739 20	100	3276	1.7e- 310	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis	

163444	ATU025 384	ATL8C2 5619:3 3..107 6	nap							936500 34	100	1445	1.7e- 132	thalia nal (AC005 396) putati ve flavon ol sulfot ransfe rase [Arabi dopsis thalia nal]
163445	ATU025 385	ATL8C1 978:13 8..124 1	nap							g10417 08	100	658	2.7e- 72	(U3048 1) expans in At- EXP2 [Arabi dopsis thalia nal]
163446	ATU025 386	ATL8C5 95:168 7..536	nap							g22450 79	100	614	3.5e- 58	(Z9734 3) hypoth etical protei n [Arabi dopsis thalia nal]
163447	ATU025 387	ATL8C3 6341:8 138..3 911	nap							g42104 23	100	714	6.1e- 57	(AL035 331) /predi ction= ction= (metho d:;

State	Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
Alabama	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

163448	ATU025 388	ATL8C3 2780:4 32..15 26	nap																/prediction= (method: :/match =(desc :; /match =(desc :; /match =(desc :; /motif =(desc :[Drosophila melanogaster]]
163449	ATU025 389	ATL8C5 98:182 6...807	nap																(AC000132) F21M12 .4 gene product [Arabidopsis thaliana] (AC000294) Hypothetical protein [Arabidopsis]

163454	ATU025 394	ATL8C4 1506:3 248..1 287	nap									g46783 48	100	1733	5.0e- 176	[Arabi dopsis thalia na] (AL049 659) putati ve protei n [Arabi dopsis thalia na]
163455	ATU025 395	ATL8C1 4072:4 207..3 542	nap									g25007 17	100	470	1.6e- 43	STS14 PROTEI N PRECUR SOR [Solan um tubero sum]
163456	ATU025 396	ATL8C2 0746:2 423..5 273	nap									g43253 48	100	2061	2.9e- 143	(AF128 394) contai ns simila rity to phosph ate transp orters [Arabi dopsis thalia na]
163457	ATU025 397	ATL8C2 2146:2	nap									g32490 67	100	468	1.3e- 46	(AC004 473)

163468	ATU025 408	ATL8C9 :2037. .1374	nap										g40380 66	100	132	7.3e- 62	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
163469	ATU025 409	ATL8C4 3161:9 56..22 6	nap										g35229 62	100	137	8.9e- 15	(AC004 411) unknow n protei n [Arabi dopsis thalia na]
163470	ATU025 410	ATL8C3 2796:4 932..2 504	nap										g47739 20	100	2792	2.3e- 270	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]
163471	ATU025 411	ATL8C4 4323:9 10..47	nap										g28275 32	100	1239	2.9e- 87	(AL021 633) predic ted protei n

163477	ATU025 417	ATL8C1 4029:5 033..4 380	nap								g40380 66	100	578	4.2e- 26	n [Arabi dopsis thalia nal] (AC005 897) hypoth etical protei n [Arabi dopsis thalia nal]
163478	ATU025 418	ATL8C5 0163:5 083..9 07	nap								g45672 95, g33193 60	100, 54	1677, 1612	7.5e- 173, 4.1e- 135	(AC006 918) putati ve pol polypr otein [Arabi dopsis thalia nal]; (AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB

163479	ATU025 419	ATL8C4 4409:1 711..2 30	nap								100, 59	1142, 201	6.0e- 109, 1.9e- 08	(AF058 826) T26D22 .5 gene produc t [Arabi dopsis thalia na]; (AF147 259) No defini tion line found [Arabi dopsis thalia na]	007467) [Arabi dopsis thalia na]
163480	ATU025 420	ATL8C4 1794:2 953..2 280	nap								100	746	1.4e- 20	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]	
163481	ATU025 421	ATL8C9 324:11	nap								100	990	3.7e- 76	(Y1834 8) U2	

163484	ATU025 424	ATL8C4 9779:2 114..4 332	nap							g41153 76	100	1679	2.7e- 152	(AC005 967) unknown protein [Arabi dopsis thalia na]	(GB:X8 1801) [Arabi dopsis thalia na]
163485	ATU025 425	ATL8C3 9163:3 902..4 588	nap							g40380 66	100	444	7.2e- 22	(AC005 897) hypoth etical protein [Arabi dopsis thalia na]	(AC005 897) hypoth etical protein [Arabi dopsis thalia na]
163486	ATU025 426	ATL8C1 9586:1 362..5 01	nap							g32978 13	100	278	4.1e- 19	(AL031 032) hypoth etical protein [Arabi dopsis thalia na]	(AL031 032) hypoth etical protein [Arabi dopsis thalia na]
163487	ATU025 427	ATL8C2 28:740 7..811 2	nap							g40380 66	100	589	5.4e- 33	(AC005 897) hypoth etical	(AC005 897) hypoth etical

163488	ATU025 428	ATL8C1 9489:1 61..81 5	nap										g31233 11	100	213	2.9e- 11	HYPOTH ETICAL 24.8 KD PROTEI N IN DEGS- TAGO INTERG ENIC REGION [Bacil lus subtil is]
163489	ATU025 429	ATL8C3 4803:2 82..15 26	nap										g36000 37	100	1307	2.9e- 137	(AF080 119) T12H20 .5 gene produc t [Arabi dopsis thalia na]
163490	ATU025 430	ATL8C2 5031:6 79..14 01	nap										g49143 78	100	536	1.7e- 38	(AC007 584) hypo thetical protein [Arabi dopsis thalia na]

[illegible]

163491	ATU025 431	ATL8C7 680:10 55..23 49	nap							g33778 36	100	539	2.7e- 62	thalia nal (AF075 598) contai ns simila rity to revers e transc riptas es [Arabi dopsis thalia nal]
163492	ATU025 432	ATL8C4 1836:1 357..2 241	nap							g26513 06	100	1355	2.3e- 134	(AC002 336) putati ve serine /threo nine protei n kinase [Arabi dopsis thalia nal]
163493	ATU025 433	ATL8C4 2312:1 03..10 13	nap							g45859 86	100	166	1.2e- 13	(AC005 287) Hypoth etical protei n [Arabi dopsis

163494	ATU025 434	ATL8C1 3940:1 0609.. 12484	nap									g45672 96	100	1641	1.2e- 156	thalia nal (AC006 918) putati ve Athila retroe lement ORF1 protei n [Arabi dopsis thalia nal]
163495	ATU025 435	ATL8C1 0126:1 ..1373	nap									g42621 75, g43357 20	100, 39	159, 407		(AC005 508) 12894 [Arabi dopsis thalia nal]; (AC006 248) putati ve revers e transc riptas e Tal- 1 [Arabi dopsis thalia nal]
163496	ATU025 436	ATL8C3 3167:1 173..2	nap									g31766 79	100	676	5.2e- 75	(AC003 671) F1707.

163497	ATU025 437	ATL8C7 742:38 66..31 29	nap										g40380 66	100	469	3.1e- 31	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]	8 [Arabi dopsis thalia na]
163498	ATU025 438	ATL8C1 3940:6 602..8 669	nap										g45860 66	100	2234	9.9e- 224	(AC006 194) putati ve pol ypr otei n, 3' partia l [Arabi dopsis thalia na]	
163499	ATU025 439	ATL8C4 4442:1 672..3 016	nap										g44552 03	100	987	7.8e- 97	(AL035 440) putati ve protei n [Arabi dopsis thalia na]	
163500	ATU025 440	ATL8C1 687:76	nap										g45858 81	100	1918	7.6e- 196	(AC005 850) [Arabi dopsis thalia na]	

163501	ATU025 441	1..195 7	nap							g40380 66	100	620	5.5e- 42	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
163502	ATU025 442	ATL8C4 3813:2 043..3 841	nap							g45672 96	100	2469		(AC006 918) putati ve Athila retro element ORF1 protei n [Arabi dopsis thalia na]
163503	ATU025 443	ATL8C1 7576:1 625..5 79	nap							g32192 73	100	636	2.5e- 69	(AB015 316) MAP kinase 5 [Arabi dopsis thalia na]

163504	ATU025 444	ATL8C3 5923:5 11..19 09	nap							g11736 24	100	1355	3.5e- 145	thalia na] (U3474 4) cytoch rome P-450 [Phala enopsi s sp. 'hybri d SM9108 '.]
163505	ATU025 445	ATL8C1 0471:1 817..6 117	nap							g45126 18	100	4511		(AC004 793) Strong simila rity to [.]
163506	ATU025 446	ATL8C1 9367:2 863..1 769	nap							g45570 64	100	772	4.4e- 48	(AC007 045) hypoht etical protei n [Arabi dopsis thalia na]
163507	ATU025 447	ATL8C4 0590:3 952..4 794	nap							g40380 66	100	709	5.4e- 33	(AC005 897) hypoht etical protei n [Arabi dopsis thalia na]

163508	ATU025 448	ATL8C1 3907:9 529..5 694	nap							g32427 13, g28326 47, g21911 90	100, 87, 86	1578, 94, 1056	1.1e- 171, 0.0019 , 2.4e- 105	(AC003 040) putati ve transp osase [Arabi dopsis thalia na]; (AL021 710) hypoth etical protei n [Arabi dopsis thalia na]; (AF007 271) contai ns a short region of simila rity to transp osases [Arabi dopsis thalia na]
163509	ATU025 449	ATL8C1 3050:2 891..1 912	nap							g43357 45	100	1034	1.7e- 95	(AC006 284) putati ve

163512	ATU025 452	ATL8C2 3742:1 200..7	nap							g22448 80	100	930	4.5e- 100	na] (Z9733 8) ABC transp orter homolo g [Arabi dopsis thalia na]
163513	ATU025 453	ATL8C4 207:23 21..11 42	nap							g14832 18	100	406	1.4e- 47	(X9979 3) induce d upon woundi ng stress [Arabi dopsis thalia na]
163514	ATU025 454	ATL8C9 852:25 0..119 5	nap							g42205 25	100	833	1.4e- 78	(AL035 356) putati ve tRNA isopen tenylt ransfe rase [Arabi dopsis thalia na]
163515	ATU025 455	ATL8C2 103:21 1..162 0	nap							g45585 53	100	543	2.2e- 56	(AC007 138) putati ve potass

163516	ATU025 456	ATL8C3 791:14 17..30 3	nap										g22621 62	100	528	1.1e- 59	ium channe l [Arabi dopsis thalia na]
163517	ATU025 457	ATL8C1 236:14 44..65 3	nap										g48862 86	100	573	4.6e- 43	(AL050 300) putati ve protei n [Arabi dopsis thalia na]
163518	ATU025 458	ATL8C1 7583:1 257..5 18	nap										g29213 23	100	905	4.8e- 92	(AF034 112) beta- 1,3-

163526	ATU025 466	ATL8C3 846:31 01..49 0	nap							g45811 64	100	1500	3.6e- 160	na] (AC006 220) putati ve polypr otein [Arabi dopsis thalia na]
163527	ATU025 467	ATL8C2 3904:1 831..2 1	nap							g45672 96	100	2241	3.9e- 200	(AC006 918) putati ve Athila retro ement ORF1 protei n [Arabi dopsis thalia na]
163528	ATU025 468	ATL8C3 4012:3 442..2 632	nap							g42621 75	100	783	4.4e- 76	(AC005 508) 12894 [Arabi dopsis thalia na]
163529	ATU025 469	ATL8C4 0267:1 092..9 0	nap							g21911 96	100	574	1.1e- 59	(AF007 271) contai ns a MADS domain [Arabi dopsis

163530	ATU025 470	ATL8C4 3877:1 897..1 223	nap							g48862 86	100	757		thalia nal (AL050 300) putati ve protei n [Arabi dopsis thalia nal]
163531	ATU025 471	ATL8C1 6916:3 556..2 485	nap							g21911 58	100	606	5.0e- 59	(AF007 270) contai ns simila rity to A. thalia na zinc finger protei n (PID:g 976277) [Arabi dopsis thalia nal]
163532	ATU025 472	ATL8C2 3904:6 710..4 272	nap							g47739 20	100	3224	1.4e- 303	(AF147 259) F10A2. 17 gene produc t [Arabi

[illegible]

															dopsis thalia nal
163537	ATU025 477	ATL8C2 4098:4 961..3 904	nap								g41851 44	100	686	1.9e- 71	(AC005 724) unknown n protei n [Arabi dopsis thalia nal
163538	ATU025 478	ATL8C1 3624:1 0149.. 4789	nap								g43253 48, g30470 73	100, 78	2056, 1762	1.3e- 142, 1.4e- 142	(AF128 394) contai ns simila rity to phosph ate transp orters [Arabi dopsis thalia nal]; (AF058 825) contai ns simila rity to retrot ranspo son- like protei

163539	ATU025 479	ATL8C3 9540:2 21..22 89	nap									g45860 66	100	2383	2.7e- 221	ns [Arabi dopsis thalia na]
163540	ATU025 480	ATL8C3 0398:3 09..13 93	nap									g44173 07	100	1472	1.8e- 143	(AC006 446) putati ve pol polypr otein [Arabi dopsis thalia na]
163541	ATU025 481	ATL8C1 3069:1 782..5 03	nap									g45126 31	100	502	6.2e- 34	(AC004 793) Contai ns simila rity to [Arabi dopsis thalia na]
163542	ATU025	ATL8C1	nap									g44552	100	236	6.6e-	(AL035

163546	ATU025 486	ATL8C3 0514:7 75..35 51	nap									100, 93	216, 148	8.8e- 17, 5.8e- 15	(U7021 4) lipid A disacc haride syntha se [Esche richia coli]; (D6400 0) lipid A disacc haride syntha se [Synec hocyst is sp.]	dopsis thalia na]
163547	ATU025 487	ATL8C4 580:11 47..18 38	nap									100	1050	8.2e- 101	(AC007 134) hypoth etical protei n [Arabi dopsis thalia na]	
163548	ATU025 488	ATL8C6 817:58 02..40 15	nap									100	1169	3.7e- 109	(AL049 480) putati ve	

163552	ATU025 492	ATL8C1 1726:1 706..3 33	nap										g22447 73	100	2041	9.8e- 125	23) [Esche richia coli] (Z9733 5) hypoth etical protei n [Arabi dopsis thalia nal
163553	ATU025 493	ATL8C3 5068:1 696..1 74	nap										g28646 26	100	1705	2.6e- 164	(AL021 811) cytoch rome p450 - like protei n [Arabi dopsis thalia nal
163554	ATU025 494	ATL8C2 4700:2 57..92 7	nap										g40380 66	100	687	2.4e- 59	(AC005 897) hypoth etical protei n [Arabi dopsis thalia nal
163555	ATU025 495	ATL8C3 5064:2 436..3 56	nap										g45314 41	100	1662	1.4e- 165	(AC006 224) putati ve

163557	ATU025 497	ATL8C3 681:11 023..1 0412	nap							g40380 66	100	742	1.0e- 34	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
163558	ATU025 498	ATL8C4 590:48 1..131 7	nap							g34452 06	100	1409	2.1e- 143	(AC004 786) unknow n protei n [Arabi dopsis thalia na]
163559	ATU025 499	ATL8C1 0460:1 271..1 14	nap							g32528 16	100	971		(AC004 705) hypoth etical protei n [Arabi dopsis thalia na]

163564	ATU025 504	ATL8C1 3538:5 143..3 794	nap									g40380 66	100	536	5.6e- 30	(AC005 897) hypoth etical protein [Arabi dopsis thalia na]
163565	ATU025 505	ATL8C1 3534:8 074..6 923	nap									g27087 51	100	748	1.0e- 72	(AC003 952) hypoth etical protein [Arabi dopsis thalia na]
163566	ATU025 506	ATL8C3 9696:9 67..21 9	nap									g49143 60	100	334	9.5e- 31	(AC007 289) hypoth etical protein [Arabi dopsis thalia na]
163567	ATU025 507	ATL8C3 230:10 177..9 085	nap									g40380 66	100	414	1.3e- 22	(AC005 897) hypoth etical protein [Arabi dopsis thalia na]

163568	ATU025 508	ATL8C1 3499:1 584..9 54	nap									g40380 66	100	623	7.4e- 47	protein [Arabi dopsis thalia na]
163569	ATU025 509	ATL8C1 3071:9 85..16 54	nap									g40380 66	100	692	2.9e- 33	(AC005 897) hypoth etical protein [Arabi dopsis thalia na]
163570	ATU025 510	ATL8C1 0925:8 101..5 797	nap									g45809 90	100	652	2.5e- 69	(AFI20 335) putati ve transp osase [Arabi dopsis thalia na]
163571	ATU025 511	ATL8C3 6998:5 26..19 05	nap									g43143 56	100	992	9.1e- 104	(AC006 340) putati ve

163572	ATU025 512	ATL8C1 2682:1 989..4 009	nap							g28298 96	100	1740	4.2e- 190	anthoc yanidi n-3- glucos ide rhanno syltra nsfera se [Arabi dopsis thalia na]
163573	ATU025 513	ATL8C2 6229:2 041..3 62	nap							g46782 85	100	1413	1.6e- 147	(AC002 311) highly simila r to auxin- regula ted protei n GH3, gpIX60 033 18 591 [Arabi dopsis thalia na]
														(AL049 660) putati ve protei n [Arabi dopsis thalia na]

163581	ATU025 521	ATL8C2 6245:2 669..1 179	nap							g46436 5	100	946	5.2e- 94	PEROXI DASE P7 []
163582	ATU025 522	ATL8C2 0329:1 478..1	nap							g27389 98	100	1149	1.7e- 120	(AF022 458) CYP98A 2p [Glyci ne max]
163583	ATU025 523	ATL8C1 591:45 68..31 74	nap							g43888 23	100	822	3.6e- 61	(AC006 528) hypoth etical protei n [Arabi dopsis thalia nal]
163584	ATU025 524	ATL8C1 3447:2 062..6 44	nap							g10765 57	100	310	1.6e- 11	extens in- like protei n - cowpea (fragm ent) []
163585	ATU025 525	ATL8C2 4889:2 043..6 94	nap							g34452 10	100	1516	2.6e- 160	(AC004 786) putati ve flavon ol 3- o- glucos yltran

163596	ATU025 536	ATL8C7 310:19 15..11 82	nap										g45672 04	100	333	1.9e- 24	(AC007 168) unknown protein [Arabi dopsis thalia na]
163597	ATU025 537	ATL8C7 318:54 ..1951	nap										g46782 17	100	254	1.6e- 41	(AC007 134) hypoth etical protein [Arabi dopsis thalia na]
163598	ATU025 538	ATL8C1 7999:1 40..71 2	nap						ATL8C1 7999:1 40..70 9	1.00	g45845 32	99	309			(AL049 608) hypoth etical protein [Arabi dopsis thalia na]	
163599	ATU025 539	ATL8C4 3690:2 591..5 13	nap								g22449 16	100	1583			(Z9733 9) hypoth etical	

163600	ATU025 540	ATL8C1 8469:9 21..27 7	nap										g35229 40	100	570	7.9e- 48	prote n [Arabi dopsis thalia nal] (AC004 411) unknow n protei n [Arabi dopsis thalia nal]
163601	ATU025 541	ATL8C4 2007:2 402..9 193	nap										g42638 31	100	5731	0.0	(AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
163602	ATU025 542	ATL8C1 080:27 06..37 94	nap										g10039 6	100	397	1.5e- 33	DNA- bindin g protei n - garden petuni a [Petun ia x hybrid

163607	ATU025 547	ATL8C3 688:88 3..328 5	nap									g47739 20	100	3066	1.2e- 302	[Arabi dopsis thalia na]
163608	ATU025 548	ATL8C1 4453:1 216..2 745	nap									g45389 95	100	1824	6.3e- 197	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]
163609	ATU025 549	ATL8C4 1777:4 092..4 746	nap									g40380 66	100	559	7.9e- 18	(AL049 481) hypoth etical protei n (prøba bly remnan t) [Arabi dopsis thalia na]
163610	ATU025	ATL8C1	nap									g42205	100	139	4.7e-	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
																(AL035)

163611	ATU025 551	ATL8C4 2966:1 388..2 95	nap							24	100	404	7.1e- 25	14	356) putati ve protei n [Arabi dopsis thalia na]
163612	ATU025 552	ATL8C2 4883:2 354..4 475	nap							g43097 64	100	1010	2.5e- 100		(AC006 217) putati ve retro element integr ase [Arabi dopsis thalia na]
163613	ATU025 553	ATL8C9 757:92 2..159 0	nap							g40380 66	100	684	5.5e- 49		(AC005 897) hypoth etical protei n [Arabi dopsis thalia

163618	ATU025 558	ATL8C9 209:36 8..326 5	nap										g43253 48	100	1934		[Arabi dopsis thalia na] (AF128 394) contai ns simila rity to phosph ate transp orters [Arabi dopsis thalia na]
163619	ATU025 559	ATL8C1 4497:4 081..1 56	nap										g47739 20, g47739 08, g33193 52	100, 100, 81	3221, 2965, 455	5.0e- 306, 1.6e- 272, 1.0e- 53	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]; (AF147 259) No defini tion line found [Arabi dopsis thalia

	581	364:56 0..72						364:56 0..134	11								440) STIG1 like protei n [Arabi dopsis thalia na]
163642	ATU025 582	ATL8S3 0110:4 32..10 8	nap					ATL8S3 0110:4 32..14 0	0.99	g29243 75	99	116	3.2e- 09	(AJ224 684) hypoth etical protei n [Brady rhizob ium japoni cum]			
163643	ATU025 583	ATL8C2 6786:2 ..465	nap					ATL8C2 6786:5 7..465	0.99	g11689 11	99	303	3.3e- 26	10 KD CHAPER ONIN (PROTE IN CPN10) (PROTE IN GROES) [Porph yromon as gingiv alis]			
163644	ATU025 584	ATL8C2 4336:9 18..61 2	nap					ATL8C2 4336:8 42..61 2	0.99	g45443 79	99	351	9.6e- 08	(AC006 920) hypoth etical protei n			

163645	ATU025 585	ATL8S2 0838:3 01..71	nap						ATL8S2 0838:2 74..71	0.99	g13383 6	99	277	1.6e- 23	30S RIBOSO MAL PROTEI N S18 [Esche richia coli]	[Arabi dopsis thalia na]
163646	ATU025 586	ATL8S9 76:566 ..119	nap						ATL8S9 76:414 ..119	0.99	g46626 49	99	540	3.2e- 55	(AC006 419) hypoth etical protei n [Arabi dopsis thalia na]	
163647	ATU025 587	ATL8C9 450:15 04..85 3	nap						ATL8C9 450:14 65..85 3	0.98	g47339 77	99	458	2.2e- 43	(AC007 264) hypoth etical protei n [Arabi dopsis thalia na]	
163648	ATU025 588	ATL8C4 0830:1 409..7 19	nap						ATL8C4 0830:1 206..7 19	0.98	g44067 63	99	276	9.4e- 19	(AC006 836) unknow n protei n [Arabi dopsis thalia na]	

163649	ATU025 589	ATL8C1 0688:1 305..7 3	nap				ATL8C1 0688:1 024..7 3	0.98	g33416 99	99	1396	thalia nal (AC003 672) putati ve gibere llin beta- hydrox ylase [Arabi dopsis thalia nal]
163650	ATU025 590	ATL8C3 4983:1 33..85 1	nap				ATL8C3 4983:2 08..85 1	0.98	g30804 39	99	110	5.3e- 05 (AL022 605) putati ve protei n [Arabi dopsis thalia nal]
163651	ATU025 591	ATL8C1 1697:1 204..1 19	nap				ATL8C1 1697:1 204..2 74	0.97	g29822 93	99	226	5.8e- 11 (AF051 231) ISP42- like protei n [Picea marian a]
163652	ATU025 592	ATL8C4 6705:6 33..38 4	nap				ATL8C4 6705:6 33..43 9	0.97	g34510 73	99	177	5.5e- 07 (AL031 326) putati ve protei n

163653	ATU025 593	ATL8C2 5199:3 837..7 47	nap					0.97	g18711 79	99	261	1.6e- 14	[Arabi dopsis thalia na] (U9043 9) FMRFam ide precu sor isolog [Arabi dopsis thalia na]
163654	ATU025 594	ATL8C4 3424:1 703..1	nap					0.97	g42181 11, g25650 11	99, 54	482, 1055		(AL035 353) hypoth etical protei n [Arabi dopsis thalia na]; (AC002 983) putati ve MuDR- A-like transp oson protei n [Arabi dopsis thalia na]
163655	ATU025	ATL8C4	nap					0.97	g30627	99	147	6.7e-	(AB010

	595	3183:3 00..49				3183:2 56..13 4		91				10	433) Lipid transf er protei n [Brass ica rapa]
163656	ATU025 596	ATL8C3 696:13 79..71 7	nap			ATL8C3 696:13 79..71 7	0.97	g28298 97	99	170	3.8e- 16	(AC002 311) Unknown protei n [Arabi dopsis thalia na]	
163657	ATU025 597	ATL8C1 7308:1 01..10 42	nap			ATL8C1 7308:1 01..10 42	0.97	g34452 11	99	156	1.6e- 09	(AC004 786) hypoth etical protei n [Arabi dopsis thalia na]	
163658	ATU025 598	ATL8C1 8064:2 30..11 81	nap			ATL8C1 8064:2 30..11 81	0.97	g17807 57	99	253	3.1e- 06	(Y1029 1) highly expres sed in prolif eratin g cells [Arabi dopsis]	

163659	ATU025 599	ATL8C1 7013:1 17..63 7	nap				ATL8C1 7013:1 17..50 5	0.97		g45586 84	99	442	2.6e- 31	thalia na] (AC006 586) hypo thetical protein [Arabi dopsis thalia na]
163660	ATU025 600	ATL8C3 3946:8 815..8 324	nap				ATL8C3 3946:8 812..8 324	0.97		g47339 77	99	586		(AC007 264) hypo thetical protein [Arabi dopsis thalia na]
163661	ATU025 601	ATL8C2 8676:1 494..1 694	nap				ATL8C2 8676:1 494..1 568	0.96		g29613 91	99	129	8.5e- 08	(AL022 141) hypo thetical protein [Arabi dopsis thalia na]
163662	ATU025 602	ATL8C4 2047:1 194..1 789	nap				ATL8C4 2047:1 194..1 789	0.96		g38057 59	99	219	6.3e- 14	(AC005 693) hypo thetical protein [Arabi dopsis na]

163663	ATU025 603	ATL8C9 944:87 0..378	nap				ATL8C9 944:82 1..673	0.96	g29807 99	99	388	3.4e- 37	thalia nal (AL022 197) hypoth etical protei n [Arabi dopsis thalia nal]
163664	ATU025 604	ATL8C4 3935:1 671..2 74	nap				ATL8C4 3935:1 517..2 74	0.96	g33778 12	99	114	2.6e- 05	(AF076 275) contai ns simila rity to heavy- metal- associ ated domain contai ning protei ns (Pfam: HMA.hm , score: 12.02) [Arabi dopsis thalia nal]
163665	ATU025 605	ATL8C8 321:26 7..131	nap				ATL8C8 321:26 7..129	0.96	g44689 82	99	576	4.3e- 49	(AL035 605) putati

163666	ATU025 606	5	nap					8		0.96	g45876 13	99	116	7.1e- 05	ve protei n [Arabi dopsis thalia na] (AC006 951) hypoth etical protei n [Arabi dopsis thalia na]
		ATL8C3 3382:2 275..1 866						ATL8C3 3382:2 045..1 866							
163667	ATU025 607		nap					ATL8C1 395:56 9..715		0.95	g47339 77	99	576	2.2e- 55	(AC007 264) hypoth etical protei n [Arabi dopsis thalia na]
		ATL8C1 395:43 8..921													
163668	ATU025 608		nap					ATL8C4 5176:5 6..212 5		0.95	g42622 12	99	422	2.8e- 38	(AC006 161) putati ve leucin e zipper trancr iption factor [Arabi dopsis thalia na]
		ATL8C4 5176:5 6..212 5													

163669	ATU025 609	ATL8C2 9253:1 67..65 8	nap				ATL8C2 9253:3 58..65 8	0.95	g47339 77	99	479	8.5e- 37	(AC007 264) hypoth etical protei n [Arabi dopsis thalia na]
163670	ATU025 610	ATL8C3 9957:9 57..72	nap				ATL8C3 9957:9 57..72	0.95	g40068 22	99	621	1.1e- 63	(AC005 970) hypoth etical protei n [Arabi dopsis thalia na]
163671	ATU025 611	ATL8C4 6643:1 597..4 8	nap				ATL8C4 6643:1 597..4 8	0.95	g38611 88	99	158	1.8e- 13	(AJ235 272) 50S RIBOSO MAL PROTEI N L24 (rplX) [Ricke ttsia prowaz ekil]
163672	ATU025 612	ATL8C2 7362:2 27..61 4	nap				ATL8C2 7362:2 48..61 4	0.95	g22447 57	99	100	(Z9733 5) hypoth etical protei n [Arabi	

163673	ATU025 613	ATL8C3 295:27 66..33 36	nap						ATL8C3 295:27 66..32 47	0.95	g32427 12	99		610	5.3e- 56	(AC003 040) hypo- thetical protein [Arabi dopsis thalia na]
163674	ATU025 614	ATL8C3 4581:3 7..990	nap						ATL8C3 4581:7 2..470	0.95	g47689 96	99		211	1.5e- 08	(AF140 498) hypo- thetical protein [Oryza sativa]
163675	ATU025 615	ATL8C2 0457:1 91..40 7	nap						ATL8C2 0457:2 71..31 3	0.95	g22889 87	99		153	1.3e- 08	(AC002 335) hypo- thetical protein [Arabi dopsis thalia na]
163676	ATU025 616	ATL8C2 086:10 65..58 0	nap						ATL8C2 086:10 62..60 7	0.95	g47339 77	99		562	8.2e- 52	(AC007 264) hypo- thetical protein [Arabi dopsis thalia na]

163677	ATU025 617	ATL8C2 4117:2 45..21 59	nap					ATL8C2 4117:2 45..21 59	0.94	g36872 48	99	362	5.0e- 35	thalia na] (AC005 169) hypoth etical protei n [Arabi dopsis thalia na]
163678	ATU025 618	ATL8C2 1325:5 8..437	nap					ATL8C2 1325:5 8..426	0.94	g17856 93	99	497	1.8e- 48	(Y0850 1) orf111 a [Arabi dopsis thalia na]
163679	ATU025 619	ATL8C1 3028:1 51..88 5	nap					ATL8C1 3028:1 51..88 5	0.94	g23885 76	99	679	7.5e- 63	(AC000 098) YUP8H1 2.17 [Arabi dopsis thalia na]
163680	ATU025 620	ATL8C4 9825:5 ..1545	nap					ATL8C4 9825:5 ..1545	0.94	g37023 35	99	360	5.1e- 28	(AC005 397) putati ve DNA bindin g protei n [Arabi dopsis thalia na]

163681	ATU025 621	ATL8C1 2341:6 05..11 35	nap				ATL8C1 2341:6 18..11 35	0.94	g37026 63	99	395	5.6e- 36	(AJ007 348) pathog enisis - relate d protei n 1.1 [Triti cum aestiv um]
163682	ATU025 622	ATL8C8 935:30 43..20 07	nap				ATL8C8 935:30 43..20 34	0.94	g73231 1	99	101	0.070	HYPOTH ETICAL 15.7 KD PROTEI N IN PBPD- COMA INTERG ENIC REGION (ORF2) [Bacil lus subtil is]
163683	ATU025 623	ATL8S2 9185:4 8..321	nap				ATL8S2 9185:7 5..321	0.93	g22737 0	99	276	1.5e- 15	DNA bindin g protei n HU [Bacil lus caldol yticus]
163684	ATU025	ATL8C4	nap				ATL8C4	0.93	g21911	99, 47	252,		(AF007

624	3669:4 561...2 979				3669:4 561...3 336		65, g44328 54		191		270) A_IG00 2P16.1 4 gene product [Arabi dopsis thalia nal; (AC006 300) hypoth etical protei n [Arabi dopsis thalia nal]
163685	ATU025 625	ATL8C3 7551:1 411...7 34	nap		ATL8C3 7551:1 411...7 34	0.93	g28298 98	99	385	2.8e- 30	(AC002 311) Hypoth etical protei n [Arabi dopsis thalia nal]
163686	ATU025 626	ATL8S1 0324:4 ..587	nap		ATL8S1 0324:4 ..587	0.93	g28298 16	99	261	1.9e- 07	NADH DEHYDR OGENAS E I CHAIN K (NADH- UBIQUI NONE OXIDOR

163687	ATU025 627	ATL8C5 875:11 75..17 61	nap							ATL8C5 875:11 75..17 57	0.93	g45103 61	99	439			EDUCTA SE CHAIN 11) (NUO11) [Mycob acteri um tuberc ulosis]
163688	ATU025 628	ATL8C1 2684:2 353..1 888	nap							ATL8C1 2684:2 298..1 888	0.93	g41057 90	99	82	0.0001 6	(AF049 926) PGP219 [Petun ia x hybrid al]	
163689	ATU025 629	ATL8S5 0:1..5 66	nap							ATL8S5 0:17.. 566	0.92	g44907 26	99	563	2.8e- 56	(AL035 709) hypothe tical protein [Arabi dopsis	

163690	ATU025 630	ATL8C3 6235:8 58..1	nap				ATL8C3 6235:6 87..59	0.92	g45673 15	99	1168	4.8e- 105	thalia nal (AC005 956) hypothe- tical protein [Arabi dopsis thalia nal]
163691	ATU025 631	ATL8C1 4825:1 0225.. 11521	nap				ATL8C1 4825:1 0225.. 11440	0.92	g38057 59	99	212	4.8e- 13	(AC005 693) hypothe- tical protein [Arabi dopsis thalia nal]
163692	ATU025 632	ATL8C8 76:287 0..361 2	nap				ATL8C8 76:289 2..361 0	0.92	g38602 58	99	311	5.4e- 29	(AC005 824) unknown protein [Arabi dopsis thalia nal]
163693	ATU025 633	ATL8C1 1024:1 096..5 48	nap				ATL8C1 1024:1 096..5 48	0.92	g33373 64	99	380	3.0e- 27	(AC004 481) unknown protein [Arabi dopsis thalia nal]

163694	ATU025 634	ATL8S2 387:19 7..433	nap				ATL8S2 387:27 0..362	0.91	g43371 99	99	92	4.5e- 08	thalia na] (AC006 403) unknown n protei n [Arabi dopsis thalia na]
163695	ATU025 635	ATL8C3 3645:5 10..10 79	nap				ATL8C3 3645:7 72..10 79	0.91	g42630 58	99	233	2.9e- 11	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
163696	ATU025 636	ATL8C1 8190:8 06..35 2	nap				ATL8C1 8190:5 84..35 2	0.91	g46626 46	99	512	7.5e- 25	(AC006 429) hypoth etical protei n [Arabi dopsis thalia na]
163697	ATU025 637	ATL8S2 6098:5 53..44	nap				ATL8S2 6098:5 41..11 6	0.90	g18715 92	99	211	7.8e- 18	(Z9266 9) hypoth etical protei n Rv0219 [Mycob

163698	ATU025 638	ATL8C3 5753:1 ..836	nap					ATL8C3 5753:1 05..83 6	0.90	g43371 87	99	200	2.3e- 08	acteri um tuberc ulosis J (AC006 403) putati ve prolyl carbox ypepti dase, 5, partia 1 [Arabi dopsis thalia na]
163699	ATU025 639	ATL8C9 594:14 68..43 8	nap					ATL8C9 594:14 68..43 8	0.90	g45875 55	99	339	4.6e- 34	(AC006 577) F15I1. 22 [Arabi dopsis thalia na]
163700	ATU025 640	ATL8S2 2164:1 4..289	nap					ATL8S2 2164:5 0..282	0.90	g24959 80	99	111	1.2e- 07	HYPOTH ETICAL PROTEI N MJ0432 [Metha nococc us jannas chil]
163701	ATU025 641	ATL8S2 7414:6	nap					ATL8S2 7414:6	0.90	g10449 63	99	118	0.026	protam ine

163702	ATU025 642	4..513	nap				4..513	0.89	g47339 74	99	609	3.7e- 54	[Monodonta turbinata, gonads, Peptide, 106 aa] (AC007264) hypothetical protein [Arabis dopsis thaliana]
163703	ATU025 643	ATL8C2 0703:2 945..5 023	nap				ATL8C1 2791:8 07..27 2	0.89	g13506 20	99	68	0.0005 3	CHLOROPLAST 50S RIBOSOMAL PROTEIN L18 [Odontella sinensis]
163704	ATU025 644	ATL8C1 3565:1 ..2163	nap				ATL8C1 3565:6 ..2163	0.89	g42637 68	99	1564	5.4e- 136	(AC006218) hypothetical protein [Arabis dopsis thaliana]

163705	ATU025 645	ATL8C2 2513:4 02..64 4	nap			ATL8C2 2513:4 89..64 4	0.89	g47411 88	99	148	1.5e- 06	(AL049 746) hypoth etical protei n [Arabi dopsis thalia na]
163706	ATU025 646	ATL8C4 4277:5 43..15 51	nap			ATL8C4 4277:5 43..15 51	0.88	g43357 26	99	80	5.9e- 05	(AC006 248) putati ve revers e transc riptas e [Arabi dopsis thalia na]
163707	ATU025 647	ATL8C2 9341:2 89..73 3	nap			ATL8C2 9341:2 89..70 2	0.88	g45103 58	99	361	3.4e- 33	(AC006 921) putati ve touch- induce d calmod ulin [Arabi dopsis thalia na]
163708	ATU025 648	ATL8S2 8705:7 2..305	nap			ATL8S2 8705:7 2..194	0.88	g38603 23	99	369	3.4e- 33	(AJ012 688) hypoth etical

163709	ATU025 649	ATL8S1 7201:1 28..59 3	nap					ATL8S1 7201:1 37..53 4	0.88	g10767 86	99	511	2.7e- 08	hypoth etical protein n1 - perenn ial teosin te [Zea diplop erenni s]
163710	ATU025 650	ATL8C4 9615:3 287..2 227	nap					ATL8C4 9615:3 287..2 227	0.88	g45080 82	99	275	7.2e- 14	(AC005 882) Putati ve RNA polyme rase II subuni t Rpb10 [Arabi dopsis thalia na]
163711	ATU025 651	ATL8C2 0815:2 795..1	nap					ATL8C2 0815:2 795..7 9	0.88	g47339 66, g43888 21	99, 80	132, 1325	0.0071 , 1.7e- 134	(AC007 261) hypoth etical protein n [Arabi dopsis thalia

163712	ATU025 652	ATL8C1 4785:9 43..13 53	nap						ATL8C1 4785:9 43..12 75	0.88	g40564 97	99	618	1.2e- 40	(AC006 528) putati ve mudrA transp osase protei n [Arabi dopsis thalia na]
163713	ATU025 653	ATL8C8 069:39 62..44 49	nap						ATL8C8 069:39 62..44 49	0.88	g16209 86	99	321	1.6e- 27	(Y0885 8) 40S riboso mal protei n S17 [Nicot iana plumba ginifo lia]
163714	ATU025 654	ATL8C2 9257:1 239..1 697	nap						ATL8C2 9257:1 239..1 697	0.88	g45876 18	99	260	1.8e- 24	(AC006 951) hypoth etical protei

163715	ATU025 655	ATL8C9 527:69 7..173 6	nap					ATL8C9 527:69 7..173 6	0.88	g23469 80	99	111	1.4e- 10	n [Arabi dopsis thalia na] (AB006 602) ZPT2-7 [Petun ia x hybrid a]
163716	ATU025 656	ATL8C3 4337:1 ..1103	nap					ATL8C3 4337:1 ..1103	0.87	g46626 48	99	108	0.0002 6	n [Arabi dopsis thalia na] (AC006 419) hypoth etical protei n
163717	ATU025 657	ATL8C4 5590:1 163..1 45	nap					ATL8C4 5590:8 04..20 6	0.86	g25586 61	99	338	2.0e- 31	n [Arabi dopsis thalia na] (AC002 354) No defini tion line found [Arabi dopsis thalia na]
163718	ATU025 658	ATL8C2 145:11 85..1	nap					ATL8C2 145:11 73..10 51	0.86	g45858 84	99	1421	8.4e- 138	n [Arabi dopsis thalia na] (AC005 850) Hypoth etical protei n

163720	ATU025 660	ATL8C2 1162:1 33..56 6	nap					ATL8C2 1162:1 33..56 6	0.86	g39151 94	99	138	3.0e- 09	n (PEBP) and hippoc ampal cholin ... [] HYPOTH ETICAL TRANST HYRETI N-LIKE PROTEI N R09H10 .3 IN CHROMO SOME IV [Caeno rhabdi tis elegan s]
163721	ATU025 661	ATL8S6 955:11 ..402	nap					ATL8S6 955:68 ..396	0.86	g11768 67	99	230		HYPOTH ETICAL PROTEI N HI0562 [Haemo philus influe nzae Rd]
163722	ATU025 662	ATL8C9 252:11 43..21 6	nap					ATL8C9 252:11 43..21 6	0.86	g30213 44	99	564		(AJ004 959) hypoth etical protei n

163723 163724 163725 163726
 663 664 665 666
 826:28 826:34 2349:5 0179:2
 31..38 31..38 56..11 83..79
 15 15 88..11 2
 nap nap nap nap

163723	ATU025 663	ATL8C9 826:28 31..38 15	nap					ATL8C9 826:34 31..38 15	0.86	g45389 94	99	270	2.5e- 23	[Cicer arieti num] (AL049 481) hypoth etical protei n [Arabi dopsis thalia na]
163724	ATU025 664	ATL8C4 8905:1 058..3 15	nap					ATL8C4 8905:7 42..31 5	0.86	g29504 78	99	242	1.1e- 12	(AL022 070) hypoth etical protei n [Schiz osacch aromyc es pombel]
163725	ATU025 665	ATL8C2 2349:7 88..11	nap					ATL8C2 2349:5 56..11	0.86	g22244	99	151	1.0e- 06	(X0026 3) uniden tified readin g frame [Zea mays]
163726	ATU025 666	ATL8C1 0179:2 83..79 2	nap					ATL8C1 0179:4 28..79 2	0.86	g38688 53	99	304		(AB013 853) GPI- anchor ed protei n

163727	ATU025 667	ATL8S9 824:60 9..1	nap					ATL8S9 824:59 1..400	0.85	g38057 67	99	274	1.5e- 31	[Vigna radiat a] (AC005 693) hypoth etical protei n, 5' partia l [Arabi dopsis thalia na]
163728	ATU025 668	ATL8C3 5599:7 22..11 7	nap					ATL8C3 5599:7 22..14 1	0.85	g11730 96	99	503	9.4e- 47	RIBONU CLEASE HII (RNASE HII) [Haemo philus influe nzae Rd]
163729	ATU025 669	ATL8C1 4523:1 264..9 6	nap					ATL8C1 4523:1 264..2 06	0.85	g45586 84	99	444	0.0081	(AC006 586) hypoth etical protei n [Arabi dopsis thalia na]
163730	ATU025 670	ATL8C2 4799:1 605..9 0	nap					ATL8C2 4799:1 605..9 0	0.85	g45875 61	99	628	1.2e- 62	(AC006 577) F15I1. 28 [Arabi

163734	ATU025 674	ATL8C2 7868:1 841..1	nap						ATL8C2 7868:1 814..1 48	0.85		g10649 31	99	887		[Arabi dopsis thalia na] (X9296 5) cyclin A-like protei n [Nicot iana tabacu m]
163735	ATU025 675	ATL8C1 9440:1 119..8	nap						ATL8C1 9440:7 70..8	0.85		g49143 59	99	471	3.6e- 42	(AC007 289) hypoth etical protei n [Arabi dopsis thalia na]
163736	ATU025 676	ATL8C4 2086:1 586..1 027	nap						ATL8C4 2086:1 586..1 079	0.84		g45859 30	99	711	1.0e- 72	(AC007 211) hypoth etical protei n [Arabi dopsis thalia na]
163737	ATU025 677	ATL8C4 3377:6 93..12 4	nap						ATL8C4 3377:4 56..18 6	0.84		g40068 23	99	255		(AC005 970) hypoth etical protei n

163738	ATU025 678	ATL8C3 0529:4 9..189 2	nap					ATL8C3 0529:4 9..189 2	0.84	g47339 70	99	136	7.2e- 10	[Arabi dopsis thalia na] (AC007 264) hypoth etical protei n [Arabi dopsis thalia na]
163739	ATU025 679	ATL8C4 5563:1 865..1 311	nap					ATL8C4 5563:1 865..1 311	0.84	g38057 59	99	222	1.9e- 13	(AC005 693) hypoth etical protei n [Arabi dopsis thalia na]
163740	ATU025 680	ATL8C2 1764:1 573..4 15	nap					ATL8C2 1764:1 573..4 15	0.84	g23427 35	99	247	8.6e- 19	(AC002 341) unknow n protei n [Arabi dopsis thalia na]
163741	ATU025 681	ATL8C4 0852:1 274..4 70	nap					ATL8C4 0852:1 274..4 78	0.84	g21296 30	99	517	7.6e- 42	lamin - Arabid opsis thalia na

163742	ATU025 682	ATL8C4 5756:1 593..9 0	nap						ATL8C4 5756:1 593..9 0	0.84	g45389 15	99	310	5.9e- 27	[Arabi dopsis thalia na] (AL049 482) hypoth etical protei n [Arabi dopsis thalia na]
163743	ATU025 683	ATL8C1 028:13 97..22 0	nap						ATL8C1 028:13 97..24 9	0.84	g33778 09	99	325	1.8e- 34	(AF075 597) contai ns simila rity to SRF- type transc riptio n factor s (DNA- bindin g and dimeri zation domain) (PFam: transc ript_f act.hm m,

163744	ATU025 684	ATL8S3 84:509 ..2	nap						ATL8S3 84:509 ..36	0.84	g34028 40	99	133	9.2e- 08	(Y1787 2) putati ve sensor kinase [Eubac terium acidam inophi lum]	score: 15.85) [Arabi dopsis thalia nal]
163745	ATU025 685	ATL8S4 382:32 ..352	nap						ATL8S4 382:49 ..352	0.84	g28295 67	99	148	9.3e- 13	HYPOTH ETICAL 11.4 KD PROTEI N CY277. 17 [Mycob acteri um tuberc ulosis]	
163746	ATU025 686	ATL8C4 2376:4 47..19 15	nap						ATL8C4 2376:4 47..19 15	0.84	g28326 47	99	414	2.1e- 22	(AL021 710) hypoth etical protei n [Arabi dopsis thalia	

163747	ATU025 687	ATL8S8 714:56 9..5	nap				ATL8S8 714:33 3..64	0.83	g40068 23	99	181	1.1e- 14	na] (AC005 970) hypoth etical protei n [Arabi dopsis thalia na]
163748	ATU025 688	ATL8C4 6258:8 63..16 69	nap				ATL8C4 6258:8 63..16 17	0.83	g45859 30	99	696	8.7e- 67	(AC007 211) hypoth etical protei n [Arabi dopsis thalia na]
163749	ATU025 689	ATL8C3 983:33 4..735	nap				ATL8C3 983:58 3..448	0.83	g30972 62	99	117	1.5e- 06	(AJ005 742) self- incomp atibil ity [Papav er nudica ule]
163750	ATU025 690	ATL8C1 8989:6 00..57	nap				ATL8C1 8989:5 19..57	0.83	g28299 00	99	247	1.1e- 20	(AC002 311) simila r to ripeni ng- induce d protei

163751	ATU025 691	ATL8C3 6769:8 66..19 1	nap						ATL8C3 6769:8 66..19 1	0.83	g23410 29	99	769	8.9e- 30	n, gp AJ0 01449 246501 5 and major latex protei n, gp X91 961 11 07495 [Arabi dopsis thalia na]
163752	ATU025 692	ATL8C3 183:1. .2751	nap						ATL8C3 183:46 3..227 6	0.83	g18711 79, g48952 42	99, 79	369, 1514	4.0e- 22, 1.1e- 100	(U9043 9) FMRFam ide precur sor isolog [Arabi dopsis thalia na]; (AC007 659) putati ve transc

163753	ATU025 693	ATL8C2 5086:1 292..2 847	nap					ATL8C2 5086:1 292..2 847	0.83	g10026 6	99	167	7.7e- 14	homeo- tic protein Hox7 - Peruvian tomato [Lycopersicon peruvianum] (AC005 275) putative frataxin- like protein [Arabidopsis thaliana]
163754	ATU025 694	ATL8C4 2657:1 0..138 4	nap					ATL8C4 2657:2 95..13 84	0.82	g42621 52	99	471	1.0e- 41	(AC005 275) putative frataxin- like protein [Arabidopsis thaliana]
163755	ATU025 695	ATL8S1 29:762 ..26	nap					ATL8S1 29:380 ..26	0.82	g44328 43	99	136	6.9e- 17	(AC006 283) hypothetical protein [Arabidopsis thaliana]

163756	ATU025 696	ATL8C3 1987:3 99...66 1	nap				ATL8C3 1987:4 65...63 7	0.81	g43357 26	99	194	4.5e- 14	dopsis thalia na] (AC006 248) putati ve revers e transc riptas e [Arabi dopsis thalia na]
163757	ATU025 697	ATL8C1 9848:9 16...27 0	nap				ATL8C1 9848:6 05...27 0	0.81	g21297 52	99	214	4.8e- 20	thiore dixin - Arabid opsis thalia na [Arabi dopsis thalia na]
163758	ATU025 698	ATL8C4 6972:2 274...1 661	nap				ATL8C4 6972:2 248...1 661	0.81	g45586 75	99	636	1.2e- 21	(AC006 586) hypoth etical protei n [Arabi dopsis thalia na]
163759	ATU025 699	ATL8S1 1889:5 2...744	nap				ATL8S1 1889:5 2...726	0.81	g43356 78, g43356	99, 61	139, 97	1.2e- 13, 0.0001	(U6500 1) unknow

									79				1	n [Sphin gomona s sp.]; (U6500 1) unknow n [Sphin gomona s sp.]
163760	ATU025 700	ATL8C1 4661:3 27..59 0	nap						0.81	g22889 84	99	374	2.6e- 35	(AC002 335) hypoth etical protei n [Arabi dopsis thalia na]
163761	ATU025 701	ATL8C2 6638:9 28..86	nap						0.80	g40068 62	99	181	9.8e- 14	(Z9970 7) putati ve cytosk eletal protei n [Arabi dopsis thalia na]
163762	ATU025 702	ATL8C2 8030:1 206..6 20	nap						0.80	g44552 19	99	410	2.4e- 23	(AL035 440) hypoth etical protei n

163763	ATU025 703	ATL8C1 0163:1 46..37 6	nap					ATL8C1 0163:1 73..37 6	0.79	g43712 89	99	324		[Arabi dopsis thalia na] (AC006 260) putative DNA-binding protein SlF [Arabi dopsis thalia na] (AC005 693) hypothetical protein [Arabi dopsis thalia na]; (AC006 217) putative retrotransposon polyprotein [Arabi dopsis thalia na]
163764	ATU025 704	ATL8C2 2303:1 ..8677	nap					ATL8C2 2303:6 31..86 77	0.79	g38057 59, g43097 63	99, 84	214, 3878	9.7e- 12, 5.4e- 303	[Arabi dopsis thalia na] (AC005 693) hypothetical protein [Arabi dopsis thalia na]; (AC006 217) putative retrotransposon polyprotein [Arabi dopsis thalia na]

708	8291:4 24..35					8291:1 76..35					17	operon ORF1 hypoth etical protei n - Serrat ia marces cens plasmid pDU135 8 [Plasm id pDU135 8]
163769	ATU025 709	ATL8C2 3966:8 12..24 63	nap			ATL8C2 3966:8 12..24 63	0.78	g16534 88	99	83	0.0028	(D9091 4) hypoth etical protei n [Synec hocyst is sp.]
163770	ATU025 710	ATL8C2 2999:6 4..242 6	nap			ATL8C2 2999:1 18..24 26	0.78	g49144 37	99	251	4.4e- 17	(AL050 351) putati ve protei n [Arabi dopsis thalia na]
163771	ATU025 711	ATL8C4 827:33	nap			ATL8C4 827:33	0.78	g17300 34	99	102	0.0019	KE2 PROTEI

163772	ATU025 712	6..136 3	nap				6..135 7	0.78	g30972 60	99	83	4.5e- 10	N HOMOLOG [Caenorhabditis elegans] (AJ005741) self-incompatibility [Papaver rhoeas]
163773	ATU025 713	ATL8C2 099:63 1..216	nap				ATL8C2 099:62 2..534	0.77	g47339 77	99	451	2.4e- 33	(AC007264) hypothetical protein [Arabidopsis thaliana]
163774	ATU025 714	ATL8S2 7893:4 71..85	nap				ATL8S2 7893:4 59..85	0.77	g45804 65	99	440	7.4e- 31	(AC006081) hypothetical protein [Arabidopsis thaliana]
163775	ATU025 715	ATL8C2 7678:5	nap				ATL8C2 7678:5	0.77	g45824 66	99	145		(AC007071)

163776	ATU025 716	75..32	nap				25..32	0.77	g21905 41	99	212	4.2e- 10	(AC001 229) No defini tion line found [Arabi dopsis thalia na]
163777	ATU025 717	ATL8C1 312:12 ..623	nap				ATL8C1 312:12 ..623	0.77	g45393 81	99	452	4.7e- 36	(AL035 526) putative protein [Arabi dopsis thalia na]
163778	ATU025 718	ATL8C3 5412:1 768..1 10	nap				ATL8C3 5412:1 482..1 10	0.77	g82696	99	85	0.45	glycin e-rich protein - maize [Zea mays]
163779	ATU025 719	ATL8C1 1695:5 74..11 28	nap				ATL8C1 1695:5 86..11 28	0.77	g28298 99	99	433	3.6e- 38	(AC002 311) simila r to

163781	ATU025 721	ATL8C1 4791:3 195..2 009	nap					ATL8C1 4791:2 924..2 009	0.76	g20621 68	99	134	0.0037	(AC001 645) hypoth etical protein n [Arabi dopsis thalia na]
163782	ATU025 722	ATL8C4 5183:1 017..6 46	nap					ATL8C4 5183:1 017..1 012	0.76	g26422 15	99	104	1.0e- 06	(AF030 386) NOI protein n [Arabi dopsis thalia na]
163783	ATU025 723	ATL8C2 9152:7 ..625	nap					ATL8C2 9152:2 48..62 5	0.75	g41027 27	99	239	1.1e- 21	(AF015 782) blight - associ ated protei n p12 precu sor [Citru s jambhi

163784	ATU025 724	ATL8C1 2915:1 37..25 73	nap				ATL8C1 2915:1 37..25 73	0.75	g12451 05	99	140	0.087	ri] (U4646 3) glutam ine repeat protei n-1 [Mus muscul us]
163785	ATU025 725	ATL8C1 8691:2 ..817	nap				ATL8C1 8691:4 8..642	0.75	g45899 58	99	266	7.6e- 23	(AC007 169) hypoth etical protei n [Arabi dopsis thalia nal]
163786	ATU025 726	ATL8C4 1472:6 44..23 7	nap				ATL8C4 1472:6 44..29 4	0.75	g13621 08	99	625	1.6e- 49	histon e H3 homolo g - common tobacc o []]
163787	ATU025 727	ATL8C1 0930:4 462..1 617	nap				ATL8C1 0930:4 462..1 820	0.75	g73177 7	99	109	3.8e- 07	HYPOTH ETICAL 11.0 KD PROTEI N IN FAA3- MAS3 INTERG ENIC REGION [Sacch

163788	ATU025 728	ATL8S2 003:38 6..3	nap					ATL8S2 003:36 8..21	0.75	g22931 69	99	139	2.9e- 12	aromyc es cerevi siae] (AF008 220) transc riptio n regula tor [Bacil lus subtil is]
163789	ATU025 729	ATL8C2 0755:9 46..11 1	nap					ATL8C2 0755:9 46..24 2	0.75	g48039 58	99	643	6.4e- 64	(AC006 202) unknow n protei n [Arabi dopsis thalia na]
163790	ATU025 730	ATL8C3 3088:4 18..10 45	nap					ATL8C3 3088:4 18..98 1	0.75	g45593 86	99	654	4.2e- 63	(AC006 526) putati ve polyga lactur onase [Arabi dopsis thalia na]
163791	ATU025 731	ATL8C4 8407:3 047..2 077	nap					ATL8C4 8407:3 047..2 077	0.74	g39414 34	99	783	4.9e- 65	(AF062 871) putati ve

163796	ATU025 736	ATL8C4 3814:2 024..1 568	nap					ATL8C4 3814:2 024..1 568	0.74	g45876 18	99	268	(AC006 951) hypoth etical protein [Arabi dopsis thalia na]
163797	ATU025 737	ATL8C1 9763:1 ..901	nap					ATL8C1 9763:4 6..191	0.73	g33722 33	99	505	(AF019 248) RNA polyme rase I, II and III 24.3 kDa subuni t [Arabi dopsis thalia na]
163798	ATU025 738	ATL8C9 913:12 31..48 2	nap					ATL8C9 913:12 17..89 8	0.73	g45824 62	99	297	(AC007 071) hypoth etical protein [Arabi dopsis thalia na]

163799	ATU025 739	ATL8C3 2322:5 61..12 67	nap					ATL8C3 2322:6 15..12 67	0.73	g45672 25	99	266	2.2e- 24	dopsis thalia nal (AC007 119) unknown n protei n [Arabi dopsis thalia nal
163800	ATU025 740	ATL8S4 848:13 4..551	nap					ATL8S4 848:13 4..551	0.73	g24072 34	99	211	3.2e- 17	(AF017 750) simila r to Haemop hilus influe nzae produc t encode d by GenBan k Access ion Number U32836 [Haemo philus ducrey i]
163801	ATU025 741	ATL8C3 2068:2 659..2 164	nap					ATL8C3 2068:2 624..2 164	0.73	g30803 59	99	403	3.4e- 33	(AL022 580) hypoth etical protei

163802	ATU025 742	ATL8C4 9445:2 0..461	nap					ATL8C4 9445:2 35..33 5	0.72	g19463 74	99	86	3.0e- 12	U9321 5) myb- like protei n isolog [Arabi dopsis thalia na]
163803	ATU025 743	ATL8C1 6902:8 82..33 9	nap					ATL8C1 6902:8 82..33 9	0.72	g31932 98	99	161	3.7e- 14	(AF069 298) T14P8. 17 gene produc t [Arabi dopsis thalia na]
163804	ATU025 744	ATL8C1 3555:1 ..705	nap					ATL8C1 3555:1 17..70 5	0.72	g22526 29	99	647	2.4e- 42	(U9597 3) hypoth etical protei n [Arabi dopsis thalia na]
163805	ATU025 745	ATL8S2 1880:2 79..4	nap					ATL8S2 1880:2 42..4	0.72	g22737 0	99	286	1.8e- 24	DNA bindin g

163806	ATU025 746	ATL8C3 3380:1 42..10 04	nap					0.72	g25014 49	99	184	7.0e- 14	UBIQUITIN-LIKE PROTEIN SMT3 [Oryza sativa]
163807	ATU025 747	ATL8C2 4768:1 158..3 24	nap					0.72	g18711 96	99	784	2.1e- 81	(U90439) GMP kinase isolog [Arabidopsis thaliana]
163808	ATU025 748	ATL8C2 1224:4 41..13 31	nap					0.72	g21299 56	99	431	6.4e- 33	photosynthetic response protein in PAR-1c precursor - common tobacco [Nicotiana tabacum]

163809	ATU025 749	ATL8C2 4786:2 378..1 221	nap			ATL8C2 4786:2 378..1 221	0.72	g48369 19	99	646	2.le- 51	(AC007 153) 99202 [Arabi dopsis thalia nal]
163810	ATU025 750	ATL8C4 7499:2 033..3 746	nap			ATL8C4 7499:2 033..3 746	0.72	g47339 79	99	147	0.0005 3	(AC007 264) hypoth etical protei n [Arabi dopsis thalia nal]
163811	ATU025 751	ATL8C3 529:25 4..825	nap			ATL8C3 529:25 4..584	0.72	g45859 30	99	701	5.0e- 71	(AC007 211) hypoth etical protei n [Arabi dopsis thalia nal]
163812	ATU025 752	ATL8C4 18:242 ..966	nap			ATL8C4 18:277 ..966	0.72	g47614 53	99	88	2.7e- 05	(AF119 384) putati ve CAMP protei n [Mus muscul us]
163813	ATU025 753	ATL8C3 4526:1 022..5	nap			ATL8C3 4526:1 022..5	0.71	g10820 54	99	536	2.1e- 45	(Z4985 9) copper

163814	ATU025 754	ATL8C1 4825:9 943..4 397	nap					46	0.71	g45593 60	99	581	4.4e- 31	(AC006 585) hypoth etical protein [Arabi dopsis thalia na]
163815	ATU025 755	ATL8S1 1738:2 65..57 7	nap						0.71	g34200 51	99	441	2.8e- 42	(AC004 680) unknown protein [Arabi dopsis thalia na]
163816	ATU025 756	ATL8C3 9021:3 86..85 1	nap						0.70	g44172 75	99	602	4.6e- 59	(AC007 019) hypoth etical protein [Arabi dopsis thalia na]
163817	ATU025 757	ATL8C4 6109:1	nap						0.69	g45824 56,	99, 84	694, 549	1.8e- 72,	(AC007 071)

163818	ATU025 758	ATL8C2 4720:1 019..4 38	nap				1..319 8	945824 57	2.0e- 44	putative trithorax protein [Arabidopsis thaliana]; AC007071) putative zinc finger protein [Arabidopsis thaliana]
163819	ATU025 759	ATL8C1 265:16 83..19 6	nap				ATL8C1 265:10 57..32 0	929110 79	8.6e- 49	(AL021 960) putative protein [Arabidopsis thaliana]

163820	ATU025 760	ATL8C4 4256:7 62..32 1	nap				ATL8C4 4256:7 62..32 1	0.69	g30803 57	99	522	6.6e- 05	(AL022 580) hypoth etical protei n [Arabi dopsis thalia na]
163821	ATU025 761	ATL8C1 430:55 18..46 73	nap				ATL8C1 430:55 18..48 01	0.69	g45586 84	99	502	2.8e- 20	(AC006 586) hypoth etical protei n [Arabi dopsis thalia na]
163822	ATU025 762	ATL8S1 2284:6 37..8	nap				ATL8S1 2284:6 37..8	0.69	g21206 87	99	218	1.5e- 12	TodR protei n - Pseudo monas putida [Pseud omonas putida]
163823	ATU025 763	ATL8C1 5703:8 0..267 2	nap				ATL8C1 5703:3 29..20 50	0.69	g48369 35, g41153 62, g25650 02	99, 53, 33	155, 829, 191	4.1e- 15, 3.6e- 68, 7.6e- 10	(AC006 085) Hypoth etical protei n [Arabi dopsis

163826	ATU025 766	ATL8C5 528:1. .3382	nap							ATL8C5 528:37 9..338 2	0.68	947339 99, g33193 62	99, 78	744, 1935	9.2e- 73, 4.6e- 256	protein [Arabi dopsis thalia na] (AC007 187) hypoth etical protein [Arabi dopsis thalia na]; (AF077 408) contai ns simila rity to revers e transc riptas e (Pfam: rvt.hm m, score 19.29) [Arabi dopsis thalia na] (AC006 527) putati
163827	ATU025 767	ATL8C1 9855:2 154..2	nap							ATL8C1 9855:2 032..3	0.68	943098 68	99	2221	1.2e- 146	(AC006 527) putati

163828	ATU025 768	75	74	0.68	g28298 99	360	3.4e- 32	(AC002 311) simila r to ripeni ng- induce d protei n, gp AJ0 01449 246501 5 and major# latex protei n, gp X91 961 11 07495 [Arabi dopsis thalia na]
163829	ATU025 769	75	74	0.67	g37899 11	457	2.8e- 43	(AF081 802) develo pmenta l

163830	ATU025 770	ATL8C1 6695:6 11..93	nap					ATL8C1 6695:6 11..93	0.67	g38853 43	99	612	4.6e- 54	(AC005 623) hypoth etical protein [Arabi dopsis thalia na]
163831	ATU025 771	ATL8C2 6433:1 861..1	nap					ATL8C2 6433:1 271..8 8	0.67	g43253 69	99	295	3.3e- 34	(AF128 396) T3H13. 3 gene produc t [Arabi dopsis thalia na]
163832	ATU025 772	ATL8C3 0248:2 79..10 75	nap					ATL8C3 0248:2 79..10 75	0.67	g48742 71	99	157	4.1e- 09	(AC007 354) T16B5. 9 [Arabi dopsis thalia na]
163833	ATU025 773	ATL8C7 750:37 61..59 5	nap					ATL8C7 750:37 17..15 72	0.67	g22244 , g44163 01	99, 84	67, 3067	0.0001 6, 4.8e- 289	(X0026 3) uniden tified

163834	ATU025 774	ATL8C4 9864:9 9..670	nap					ATL8C4 9864:9 9..670	0.67	g28326 47	99	197	4.4e- 09	AL021 710) hypoth etical protei n [Arabi dopsis thalia na]	g frame [Zea mays]; (AF105 716) gag protei n [Zea mays]
163835	ATU025 775	ATL8C2 8104:6 69..90 9	nap					ATL8C2 8104:8 02..90 9	0.67	g31767 05	99	162	3.0e- 12	(AC002 392) hypoth etical protei n [Arabi dopsis thalia na]	g frame [Zea mays]; (AF105 716) gag protei n [Zea mays]
163836	ATU025 776	ATL8S2 4867:5 36..1	nap					ATL8S2 4867:4 28..13 3	0.66	g24964 75, g24964 74	99, 60	130, 121	2.0e- 08, 1.8e- 07	HYPOTH ETICAL 11.0 KD PROTEI N CY78.2 1C	g frame [Zea mays]; (AF105 716) gag protei n [Zea mays]

163837	ATU025 777	ATL8C1 3754:1 ..3075	nap						ATL8C1 3754:6 0..289 3	0.66	g32876 91, g32128 60	99, 36	393, 143	2.0e- 30, 5.2e- 19	(AC003 979) Contai ns simila rity to RING zinc finger protei n gb X95 455 from Gallus gallus . [Arabi dopsis
--------	---------------	----------------------------	-----	--	--	--	--	--	---------------------------------	------	-------------------------------	--------	-------------	-----------------------------	---

163838	ATU025 778	ATL8C4 5750:1 237..2 18	nap					ATL8C4 5750:1 021..4 11	0.66	g37383 23	99	482	6.6e- 46	thalia na]; (AC004 005) hypoth etical, protei n [Arabi dopsis thalia na]
163839	ATU025 779	ATL8C2 5778:5 10..15 79	nap					ATL8C2 5778:5 28..15 79	0.66	g45672 72	99	320	2.4e- 33	(AC006 841) hypoth etical protei n [Arabi dopsis thalia na]
163840	ATU025 780	ATL8C1 1602:1 0559.. 7848	nap					ATL8C1 1602:9 965..7 848	0.66	g45586 63, g31282 03	99, 48	207, 248	0.0006 2, 2.0e- 21	(AC007 063) unknow n protei n [Arabi dopsis na]

163841	ATU025 781	ATL8C3 6125:1 265..6 63	nap					ATL8C3 6125:1 265..6 63	0.66	g24620 81	99	334	6.2e- 26	thalia nal; (AC004 521) unknown protein [Arabi dopsis thalia nal] (Y0942 7) squamo sa- promot er bindin g protei n like 3 [Arabi dopsis thalia nal]
163842	ATU025 782	ATL8C4 6536:2 208..1	nap					ATL8C4 6536:2 208..3 4	0.66	g47339 74, g23427 31	99, 50	577, 250	1.0e- 57, 1.4e- 11	(AC007 264) hypoth etical protein [Arabi dopsis thalia nal; (AC002 341) hypoth

163843	ATU025 783	ATL8C9 245:69 2..321 5	nap					0.65			g49143 36	99	916		etical protei n [Arabi dopsis thalia na]
163844	ATU025 784	ATL8C8 275:96 5..238	nap					0.65			g22244	99	95	2.4e- 05	(AC005 489) F14N23 .22 [Arabi dopsis thalia na]
163845	ATU025 785	ATL8C6 41:320 ..3948	nap					0.64			g35823 39, g45824 89	99, 49	527, 642	1.6e- 50, 1.1e- 76	(X0026 3) uniden tified readin g frame [Zea mays]
															(AC005 496) unknow n protei n [Arabi dopsis thalia na]; (AL021 768) putati ve protei n

163846	ATU025 786	ATL8C1 0177:1 ..4760	nap				ATL8C1 0177:2 28..47 33	0.64	g47339 87, g33193 60	99, 59	86, 1771		[Arabi dopsis thalia na] (AC007 209) hypoth etical protei n [Arabi dopsis thalia na]; (AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
163847	ATU025 787	ATL8C3 0519:4 506..3 025	nap				ATL8C3 0519:4 439..3 025	0.64	g44552 38	99	721	1.7e- 29	(AL035 523) hypoth etical protei

163848	ATU025 788	ATL8C2 704:61 2..234	nap					ATL8C2 704:61 2..272	0.63	g31691 77	99	199	2.6e- 11	n [Arabi dopsis thalia na] (AC004 401) hypoth etical protei n [Arabi dopsis thalia na]
163849	ATU025 789	ATL8C1 1246:1 847..3 51	nap					ATL8C1 1246:1 181..6 80	0.63	g34618 32, g25860 82	99, 33	230, 261	5.2e- 20, 9.5e- 24	(AC004 138) putati ve revers e transc riptas e [Arabi dopsis thalia na]; (U7272 5) retrof it [Oryza longis tamina ta]
163850	ATU025 790	ATL8C4 5743:1 561..1 136	nap					ATL8C4 5743:1 561..1 136	0.63	g21905 41	99	232	3.1e- 15	(AC001 229) No defini

163851	ATU025 791	ATL8C9 701:80 9..410	nap					ATL8C9 701:58 5..410	0.63		g45811 74	99	187	3.4e- 12	(AC006 220) hypoth etical protei n [Arabi dopsis thalia na]
163852	ATU025 792	ATL8C2 4593:1 18..65 2	nap					ATL8C2 4593:2 02..65 2	0.63		g22041 02	99	373	6.4e- 35	(Y1389 8) glutat hione- S- transf erases [Brass ica juncea]
163853	ATU025 793	ATL8C4 1360:1 31..54 3	nap					ATL8C4 1360:3 55..54 3	0.63		g46626 46	99	377	4.8e- 25	(AC006 429) hypoth etical protei n [Arabi dopsis thalia na]
163854	ATU025 794	ATL8C7 173:33	nap					ATL8C7 173:25	0.63		g43096 96	99	442	9.8e- 23	(AC006 266)

163855	ATU025 795	25..87 9	nap				14..87 9	0.63	g14191 20	99	125		hypothetical protein [Arabidopsis thaliana]
		ATL8S6 319:45 ..386					ATL8S6 319:45 ..357						(Z75513) reverse transcriptase [Oryza sativa]
163856	ATU025 796	ATL8C4 1759:1 296..9 31	nap				ATL8C4 1759:1 247..9 31	0.63	g49268 16	99	357	2.3e-34	(AC004135) T17H7.1 [Arabidopsis thaliana]
163857	ATU025 797	ATL8C3 169:11 6..735	nap				ATL8C3 169:24 0..388	0.63	g42630 55	99	326	1.3e-32	(AC005142) hypothetical protein [Arabidopsis thaliana]
163858	ATU025 798	ATL8C2 0346:1 623..2 284	nap				ATL8C2 0346:1 638..2 135	0.62	g27652 40	99	198	0.0045	(Y12805) invertase

163859	ATU025 799	ATL8C2 0333:1 98..69 7	nap						ATL8C2 0333:4 88..69 7	0.62	g39129 22	99	232	4.3e- 19	(AF001 308) hypoth etical protei n [Arabi dopsis thalia na]	inhibi tor [Nicot iana tabacu m]
163860	ATU025 800	ATL8S2 2387:5 21..59	nap						ATL8S2 2387:4 97..59	0.62	g46786 38	99	132	0.0012	(AL049 661) hypoth etical protei n [Strep tomyce s coelic olor]	
163861	ATU025 801	ATL8C4 1841:5 009..5 655	nap						ATL8C4 1841:5 009..5 655	0.62	g26422 15	99	141	1.0e- 11	(AF030 386) NOI protei n [Arabi dopsis thalia na]	
163862	ATU025 802	ATL8S6 187:90 ..381	nap						ATL8S6 187:18 9..316	0.62	g33954 37	99	311		(AC004 683) hypoth etical	

163863	ATU025 803	ATL8C9 23:196 1..100 9	nap					ATL8C9 23:196 1..114 2	0.62	g33778 09	99	384	4.2e- 38	protein [Arabidopsis thaliana] (AF075 597) contains similarity to SRF-type transcription factor s (DNA-binding and dimerization domain) (PFam: transcription factor actin, score: 15.85) [Arabidopsis thaliana]
163864	ATU025 804	ATL8C4 7243:4	nap					ATL8C4 7243:4	0.62	g31525 84	99	625	7.9e- 57	(AC002 986)

163865	ATU025 805	37..13 00	nap							37..13 00	0.62	g45899 78	99	725	5.0e- 60	(AC007 195) unknown protein [Arabi dopsis thalia na]	YUP8H1 2R.31 [Arabi dopsis thalia na]
163866	ATU025 806	ATL8C3 9068:8 08..21	nap							ATL8C3 9068:3 61..12 8	0.62	g45824 64	99	1050	7.8e- 103	(AC007 071) hypoth etical protein [Arabi dopsis thalia na]	(AC007 071) hypoth etical protein [Arabi dopsis thalia na]
163867	ATU025 807	ATL8C2 0567:7 227..5 451	nap							ATL8C2 0567:7 227..5 451	0.62	g32427 12	99	551	1.9e- 47	(AC003 040) hypoth etical protein [Arabi dopsis thalia na]	(AC003 040) hypoth etical protein [Arabi dopsis thalia na]
163868	ATU025 808	ATL8C1 2152:1 85..89 8	nap							ATL8C1 2152:5 14..89 8	0.61	g45860 52	99	*277	1.1e- 28	(AC007 020) unknown	(AC007 020) unknown

163869	ATU025 809	ATL8C2 4089:5 47..11 24	nap				ATL8C2 4089:6 20..10 15	0.61	g13619 86	99	122	6.2e- 09	protein [Arabi dopsis thalia na]
163870	ATU025 810	ATL8C1 0960:9 61..69 0	nap				ATL8C1 0960:8 52..77 1	0.61	g43357 26	99	308	3.9e- 14	(AC006 248) putati ve revers e transc riptas e [Arabi dopsis thalia na]
163871	ATU025 811	ATL8C3 5846:6 81..21 1	nap				ATL8C3 5846:6 81..55 7	0.61	g43098 65	99	197	2.1e- 06	(AC006 527) hypoth etical protein [Arabi dopsis thalia na]

163872	ATU025 812	ATL8S2 1187:3 96..33	nap				ATL8S2 1187:3 96..33	0.61	g12002 9	99	382	1.3e- 36	FERRED OXIN []
163873	ATU025 813	ATL8C1 0949:2 528..1 968	nap				ATL8C1 0949:2 358..1 968	0.61	g38057 59	99	376	1.1e- 17	(AC005 693) hypoth etical protei n [Arabi dopsis thalia na]
163874	ATU025 814	ATL8C2 6556:1 336..1 69	nap				ATL8C2 6556:1 225..1 69	0.60	g46783 02	99	395	9.4e- 47	(AL049 655) putati ve protei n [Arabi dopsis thalia na]
163875	ATU025 815	ATL8C4 1409:9 57..14 23	nap				ATL8C4 1409:9 57..10 79	0.60	g43098 65	99	182	1.9e- 15	(AC006 527) hypoth etical protei n [Arabi dopsis thalia na]
163876	ATU025 816	ATL8C1 0699:2 717..5 17	nap				ATL8C1 0699:2 717..1 226	0.60	g36418 70	99	348		(AJ011 013) hypoth etical protei n [Cicer

163877	ATU025 817	ATL8C1 398:35 99..14 11	nap				ATL8C1 398:35 99..14 11	0.59	g48039 18	99	581	8.5e- 29	arieti num] (AC006 219) hypoth etical protei n [Arabi dopsis thalia na]
163878	ATU025 818	ATL8C7 769:1. .887	nap				ATL8C7 769:67 ..887	0.59	g39246 00, g49268 70	99, 34	120, 356	1.4e- 07, 4.5e- 30	(AF069 442) hypoth etical protei n [Arabi dopsis thalia na]; (AC007 509) putati ve revers e transc riptas e [Arabi dopsis thalia na]
163879	ATU025 819	ATL8S5 015:13 3..530	nap				ATL8S5 015:13 3..530	0.59	g29613 17	99	114	1.7e- 08	(Y1193 2) cspB [Salmo nella

163880	ATU025 820	ATL8S6 52:78. .448	nap				ATL8S6 52:155 ..308	0.59	g45824 62	99	174	3.3e- 16	typhim urium] (AC007 071) hypoth etical protei n [Arabi dopsis thalia na]
163881	ATU025 821	ATL8C2 9582:2 028..8 88	nap				ATL8C2 9582:1 624..8 88	0.58	g28326 47	99	544	1.2e- 46	(AL021 710) hypoth etical protei n [Arabi dopsis thalia na]
163882	ATU025 822	ATL8C4 6495:2 998..3 559	nap				ATL8C4 6495:2 998..3 559	0.58	g15883 65	99	150	0.56	signal peptid ase:SU BUNIT= 12kD [Homo sapien s]
163883	ATU025 823	ATL8C3 0660:1 135..3 058	nap				ATL8C3 0660:1 135..3 058	0.58	g42637 15	99	322	6.1e- 30	(AC006 223) putati ve alanin e acetyl transf erase [Arabi

																dopsis thalia nal
163884	ATU025 824	ATL8C5 754:24 68..59 2	nap						ATL8C5 754:24 68..59 2	0.58	g40068 22	99	606			(AC005 970) hypoth etical protei n [Arabi dopsis thalia nal
163885	ATU025 825	ATL8C4 1431:7 56..46	nap						ATL8C4 1431:4 35..22 3	0.58	g41057 94	99	285	1.0e- 18		(AF049 928) PGP224 [Petun ia x hybrid al
163886	ATU025 826	ATL8C6 677:56 8..152	nap						ATL8C6 677:56 4..202	0.57	g18711 79	99	493	2.3e- 46		(U9043 9) FMRFam ide precur sor isolog [Arabi dopsis thalia nal
163887	ATU025 827	ATL8C4 3254:9 80..43 4	nap						ATL8C4 3254:9 80..61 1	0.57	g41159 32	99	481	2.3e- 34		(AF118 223) No defini tion line found [Arabi dopsis

163888	ATU025 828	ATL8C1 6987:8 27..11 0	nap				ATL8C1 6987:6 33..22 0	0.57	g47259 43	99	329	1.2e- 33	thalia na] (AL049 730) putati ve adenin e phosph oribos yltran sferas e [Arabi dopsis thalia na]
163889	ATU025 829	ATL8C3 7377:2 039..1 298	nap				ATL8C3 7377:2 039..1 317	0.57	g40564 20	99	400		(AC005 322) ESTs gb T14 4077 and gb T43: 352 come from this gene. [Arabi dopsis thalia na]
163890	ATU025 830	ATL8S1 0014:7 8..467	nap				ATL8S1 0014:9 0..199	0.57	g23427 35	99	230	6.8e- 18	(AC002 341) unknow n protei n [Arabi

163891	ATU025 831	ATL8C1 4994:1 42..18 09	nap				ATL8C1 4994:1 42..18 09	0.56	g36081 45	99	158	1.6e- 09	dopsis thalia na] (AC005 314) hypoth etical protei n [Arabi dopsis thalia na]
163892	ATU025 832	ATL8C8 353:34 6..672	nap				ATL8C8 353:34 6..672	0.56	g48039 22	99	223	1.0e- 18	(AC006 264) putati ve auxin- induce d protei n [Arabi dopsis thalia na]
163893	ATU025 833	ATL8S2 3616:2 0..546	nap				ATL8S2 3616:7 2..321	0.56	g40380 34	99	179	3.5e- 06	(AC005 936) unknow n protei n [Arabi dopsis thalia na]
163894	ATU025 834	ATL8S2 7788:6 1..492	nap				ATL8S2 7788:8 7..332	0.56	g26236 01	99	81	0.92	(AF027 874) mucin- like

163895	ATU025 835	ATL8C3 4905:2 251..1 761	nap						ATL8C3 4905:2 251..1 761	0.56	g30969 44	99	317	1.1e- 27	protein [Trypan pancreas cruzi]
163896	ATU025 836	ATL8C1 9467:7 83..27 3	nap						ATL8C1 9467:7 13..52 5	0.56	g44689 82	99	419	5.1e- 32	(AL035 605) putative protein [Arabidopsis thaliana]
163897	ATU025 837	ATL8C5 0073:3 096..1 814	nap						ATL8C5 0073:3 096..1 814	0.56	g28092 54	99	109	2.1e- 09	(AC002 560) F21B7. 23 [Arabidopsis thaliana]
163898	ATU025 838	ATL8C5 086:15 56..78 7	nap						ATL8C5 086:15 56..81 1	0.56	g29147 01	99	247	2.3e- 17	(AC003 974) putative cytochrome b5

163899	ATU025 839	ATL8C4 1211:1 89..12 86	nap				ATL8C4 1211:1 89..12 86	0.56	g17070 21	99	478	1.5e- 48	[Arabi dopsis thalia na] (U7872 1) Ubiqui tin- conjug ating enzyme , E2- 16kD isolog [Arabi dopsis thalia na]
163900	ATU025 840	ATL8C4 1744:3 074..2 768	nap				ATL8C4 1744:3 064..2 916	0.55	g34452 11	99	288	2.3e- 24	(AC004 786) hypoth etical protei n [Arabi dopsis thalia na]
163901	ATU025 841	ATL8C3 2423:3 41..90 5	nap				ATL8C3 2423:3 47..83 9	0.55	g40068 23	99	174	1.6e- 13	(AC005 970) hypoth etical protei n [Arabi dopsis thalia na]
163902	ATU025 842	ATL8C8 273:21	nap				ATL8C8 273:21	0.55	g47340 15	99	443	4.2e- 42	(AC007 112)

163903	ATU025 843	0..129 4	nap				0..129 4	0.55	g23427 32	99	109		hypoth etical protei n [Arabi dopsis thalia na]
		ATL8C5 810:25 63..13 0					ATL8C5 810:25 63..13 0						(AC002 341) hypoth etical protei n [Arabi dopsis thalia na]
163904	ATU025 844	ATL8C5 0131:1 46..55 2	nap				ATL8C5 0131:1 46..22 5	0.55	g45593 64	99	401	1.3e- 31	(AC006 585) unknow n protei n [Arabi dopsis thalia na]
163905	ATU025 845	ATL8C9 819:72 7..9	nap				ATL8C9 819:72 7..9	0.55	g23306 42	99	436	1.1e- 42	(Y1456 8) tag [Pseud omonas fluore scens]
163906	ATU025 846	ATL8C4 3889:3 11..76 1	nap				ATL8C4 3889:3 75..59 2	0.55	g45586 82	99	497		(AC006 586) hypoth etical protei n

163907	ATU025 847	ATL8S4 22:689 ..41	nap					ATL8S4 22:623 ..41	0.54,		g53085 7	99	305	8.1e- 27	[Arabi dopsis thalia na] (U1289 2) pilN [Pseud omonas aerugi nosa]
163908	ATU025 848	ATL8S2 4227:2 ..510	nap					ATL8S2 4227:8 9..510	0.54		g11725 06	99	464	1.9e- 44	PILG PROTEI N [Pseud omonas aerugi nosa]
163909	ATU025 849	ATL8C3 736:76 8..120 3	nap					ATL8C3 736:76 8..120 3	0.54		g15321 63	99	427	2.0e- 40	(U6381 5) simila r to glutar edoxin encode d by GenBan k Access ion Number Z49699 ; locali zed accord ing to blastn simila rity

163912	ATU025 852	ATL8C3 0793:4 20..12 11	nap					ATL8C3 0793:5 32..12 11	0.54	g46626 46	99	507	1.2e- 29	n [Arabi dopsis thalia nal] (AC006 429) hypoth etical protei n [Arabi dopsis thalia nal]
163913	ATU025 853	ATL8C3 9165:1 ..3191	nap					ATL8C3 9165:7 7..295 A	0.54	g30470 93, g47340 12, g45672 96	99, 99, 82	1112, 482, 348	1.1e- 95, 1.1e- 32, 1.2e- 28	(AF058 826) T26D22 .5 gene produc t [Arabi dopsis thalia nal; (AC007 112) hypoth etical protei n [Arabi dopsis thalia nal; (AC006 918) putati ve

163914	ATU025 854	ATL8S2 0900:5 86..1	nap							ATL8S2 0900:4 98..18 0	0.54	g39414 54	99	826	4.6e- 77	(AF062 881) putati ve transc riptio n factor [Arabi dopsis thalia na]
163915	ATU025 855	ATL8C3 8462:8 59..30	nap							ATL8C3 8462:8 59..34	0.53	g45586 75	99	314	7.4e- 10	(AC006 586) hypoth etical protei n [Arabi dopsis thalia na]
163916	ATU025 856	ATL8C2 6233:2 157..8 45	nap							ATL8C2 6233:1 457..8 45	0.53	g45394 61, g45126 22	99, 53	171, 82	1.4e- 16, 4.2e- 06	(AL049 500) hypoth etical protei n [Arabi dopsis

163917	ATU025 857	ATL8C3 4783:1 648..3 27	nap							ATL8C3 4783:1 648..3 86	0.53	g45389 13	99	255	3.2e- 21	thalia nal; (AC004 793) F28K20 .11 [Arabi dopsis thalia nal]
163918	ATU025 858	ATL8C1 9412:1 ..565	nap							ATL8C1 9412:1 06..56 5	0.53	g39534 76	99	340	6.7e- 28	(AL049 482) putati ve protei n [Arabi dopsis thalia nal]
163919	ATU025 859	ATL8C4 7142:3 014..1 025	nap							ATL8C4 7142:3 014..1 025	0.53	g39351 40	99	190	2.7e- 21	(AC002 328) F2202. 21 [Arabi dopsis thalia nal]
163920	ATU025 860	ATL8C2 5249:2 773..3 201	nap							ATL8C2 5249:2 776..3 153	0.52	g22528 57	99	115	0.0020	(AC005 106) T25N20 .4 [Arabi dopsis thalia nal]
																(AF013 294) simila r to

163921	ATU025 861	ATL8C7 58:129 8..844	nap					ATL8C7 58:120 0..844	0.52	g42635 19	99	403	1.4e- 29	(AC004 044) small nuclea r riboopr oteins Sm-D1 [Arabi dopsis thalia na]	acidic riboso mal protei n pl [Arabi dopsis thalia na]
163922	ATU025 862	ATL8C4 2521:1 75..30 27	nap					ATL8C4 2521:1 75..21 00	0.52	g47339 87	99	146	4.5e- 08	(AC007 209) hypoth etical protei n [Arabi dopsis thalia na]	(AC007 209) hypoth etical protei n [Arabi dopsis thalia na]
163923	ATU025 863	ATL8C6 741:15 69..59 4	nap					ATL8C6 741:13 41..59 4	0.52	g28651 75	99	636	8.7e- 64	(AB010 945) AtRer1 A [Arabi dopsis thalia na]	(AB010 945) AtRer1 A [Arabi dopsis thalia na]
163924	ATU025	ATL8C1	nap					ATL8C1	0.52	g40565	99	62	7.6e-	(AC005	(AC005

163925	864	3767:2 4..956							3767:1 49..956	04								05	896) putati ve zinc finger protei n [Arabi dopsis thalia nal (AC002 335) calciu m bindin g protei n isolog [Arabi dopsis thalia nal
	ATU025 865	ATL8S2 4424:4 95..7	nap						ATL8S2 4424:4 58..7	0.52	g22889 81	99	609					4.6e- 60	(U3897 8) homolo g to 2- hydrox yhepta -2,4- diene- 1,7- dioate isomer ase; Method : concep
163926	ATU025 866	ATL8S5 530:2. .429	nap						ATL8S5 530:14 2..387	0.52	g13044 86	99	346					3.4e- 33	

163927	ATU025 867	ATL8C4 8301:1 005..1 338	nap					ATL8C4 8301:1 159..1 338	0.51	g34510 73	99	232	1.0e- 05	(AL031 326) putati ve protei n [Arabi dopsis thalia nal]	tual transl ation suppli ed by author . [napht halene sulfon ate- degrad ing bacter ium BN6]
163928	ATU025 868	ATL8C4 9754:1 430..2 2	nap					ATL8C4 9754:1 424..2 2	0.51	g39351 40	99	104	1.6e- 09	(AC005 106) T25N20 .4 [Arabi dopsis thalia nal]	
163929	ATU025 869	ATL8C2 367:84 ..2106	nap					ATL8C2 367:35 8..210 6	0.51	g45103 50	99	229	1.9e- 18	(AC006 921) hypoth etical protei n	

163930	ATU025 870	ATL8S7 757:26 ..454	nap						ATL8S7 757:35 2..52	0.51	g17305 96	99	283	5.7e- 22	[Arabi dopsis thalia na]
163931	ATU025 871	ATL8C1 0862:1 ..4342	nap						ATL8C1 0862:9 4..434 2	0.51	g30803 59, g42636 55	99, 98	207, 2170	3.7e- 17, 7.6e- 221	HYPOTH ETICAL 16.6 KD PROTEI N IN RPMF- FTSL INTERG ENIC REGION [Bacil lus subtil is] (Al022 580) hypoth etical protei n [Arabi dopsis thalia na]; (AC006 136) putati ve revers e transc riptas e [Arabi dopsis

163932	ATU025 872	ATL8C1 6760:1 987..1 212	nap					ATL8C1 6760:1 987..1 212	0.50	g45899 75	99	369	5.4e- 34	thalia nal (AC007 195) hypoth etical protei n [Arabi dopsis thalia nal]
163933	ATU025 873	ATL8C4 1805:6 166..1 3485	nap					ATL8C4 1805:6 166..1 3485	0.50	g46626 46, g42635 43	99, 86	110, 2512	0.020, 6.3e- 179	(AC006 429) hypoth etical protei n [Arabi dopsis thalia nal; (AC006 250) putati ve Athila retroe lement ORF1 protei n [Arabi dopsis thalia nal]
163934	ATU025 874	ATL8C4 1994:1 1330.. 10524	nap					ATL8C4 1994:1 1327.. 10614	0.50	g45586 84	99	512	5.2e- 10	(AC006 586) hypoth etical

163935	ATU025 875	ATL8C1 8005:6 4..103 5	nap					ATL8C1 8005:2 47..10 35	0.50	g40068 22	99	573	1.3e- 60	protein [Arabi dopsis thalia na] (AC005 970) hypoth etical protei n [Arabi dopsis thalia na]
163936	ATU025 876	ATL8C3 8990:1 679..7 7	nap					ATL8C3 8990:1 679..2 22	0.50	g36177 42	99	274	8.5e- 15	(AC005 687) RAP2.6 [Arabi dopsis thalia na]
163937	ATU025 877	ATL8C3 4236:2 715..1 354	nap					ATL8C3 4236:2 715..1 354	0.50	g23985 33	99	277	1.0e- 23	(Y1372 5) Transc riptio n factor [Arabi dopsis thalia na]
163938	ATU025 878	ATL8C4 3561:3 662..2 334	nap					ATL8C4 3561:3 662..2 334	0.50	g45103 61	99	444		(AC007 017) putati ve DNA- bindin g

163939	ATU025 879	ATL8S2 4810:1 07..49 9	nap					ATL8S2 4810:1 70..28 4	0.49	g24941 17	99	180	2.6e- 17	protein [Arabi dopsis thalia na]
163940	ATU025 880	ATL8C3 8262:5 03..83 6	nap					ATL8C3 8262:5 44..83 5	0.49	g40975 55	99	245	4.0e- 24	(U6491 0) ATFP7 [Arabi dopsis thalia na]
163941	ATU025 881	ATL8C3 9342:4 477..9 49	nap					ATL8C3 9342:4 287..9 49	0.49	g47261 15, g44173 05	99, 59	514, 547	8.4e- 38, 9.7e- 45	(AC006 436) hypoth etical protein

163942	ATU025 882	ATL8C1 0374:3 42..10 49	nap							0.49	g28326 47	99	172		[Arabi dopsis thalia na]; (AC006 446) hypoth etical protei n [Arabi dopsis thalia na]
163943	ATU025 883	ATL8C9 886:88 7..432	nap							0.49	g30972 60	99	78	2.2e- 08	(AJ005 741) self- incomp atibil ity [Papav er rheas]
163944	ATU025 884	ATL8C1 8743:3 48..76 7	nap							0.48	g26739 09	99	96	1.2e- 06	(AC002 561) hypoth etical protei n

163945	ATU025 885	ATL8S2 6690:6 90..93	nap						ATL8S2 6690:6 90..93	0.47	g38113 13	99	217	[Arabi dopsis thalia na]
163946	ATU025 886	ATL8C2 4365:2 01..67 8	nap						ATL8C2 4365:3 06..64 2	0.47	g46626 46	99	546	(AF047 974) ExbD2 [Vibri o cholerae]
163947	ATU025 887	ATL8C2 9675:1 045..3 140	nap						ATL8C2 9675:1 045..3 140	0.47	g22449 26	99	326	(AC006 429) hypoth etical protein [Arabi dopsis thalia na]
163948	ATU025 888	ATL8S2 920:15 5..565	nap						ATL8S2 920:17 6..541	0.47	g11967 52	99	109	(Z9733 9) glutar edoxin [Arabi dopsis thalia na]
163949	ATU025 889	ATL8S1 0104:7	nap						ATL8S1 0104:8	0.47	g37859 83	99	376	(M2491 6) ORF; putative [Pseud omonas putida]
														(AC005 560)

163950	ATU025 890	ATL8C2 5221:1 213..1 82	nap					0..526	0.47	g48357 79	99	146	6.9e- 12	hypothetical protein [Arabidopsis thaliana] (AC007296) F25C20.8 [Arabidopsis thaliana]
163951	ATU025 891	ATL8C2 3526:5 35..28 6	nap					ATL8C2 3526:5 35..28 6	0.47	g15321 67	99	227	8.7e- 19	(U63815) localized according to blastn similarity to EST sequences; therefore, the coding span corresponds only to an area of simila

163952	ATU025 892	ATL8C1 0505:3 67..77	nap					ATL8C1 0505:3 67..77	0.47	g30435 36	99	302				rity since the initat ion codon and stop codon could not be precis ely determ ined [Arabi dopsis thalia na]
163953	ATU025 893	ATL8C3 3896:4 607..2 44	nap					ATL8C3 3896:4 607..9 66	0.46	g40380 64	99	174				(AB000 708) SAUR [Rapha nus sativu s]
163954	ATU025 894	ATL8S1 8902:1 28..52 4	nap					ATL8S1 8902:1 34..28 9	0.46	g14026 9	99	180	5.3e- 14			(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
																HYPOTH ETICAL 15.6 KD

PROTEIN IN CYDB- TOLQ INTERG ENIC REGION [Esche- richia coli]																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

163957	ATU025 897	ATL8C1 2300:9 37..46 2	nap				ATL8C1 2300:8 98..55 2	0.46	g10820 54	99	424	1.6e- 43	thalia nal (Z4985 9) copper transp orter protei n [Arabi dopsis thalia nal]
163958	ATU025 898	ATL8C4 9675:2 469..1 862	nap				ATL8C4 9675:2 469..1 862	0.45	g45393 80	99	820	1.0e- 55	(AL035 526) putati ve protei n [Arabi dopsis thalia nal]
163959	ATU025 899	ATL8C4 1724:6 55..13	nap				ATL8C4 1724:4 24..13	0.45	g45444 26	99	337	3.4e- 33	(AC006 955) putati ve transp osase [Arabi dopsis thalia nal]
163960	ATU025 900	ATL8C1 3179:3 72..67	nap				ATL8C1 3179:3 72..13 3	0.45	g19463 65	99	448	4.3e- 42	(U9321 5) glutar edoxin isolog [Arabi dopsis]

163961	ATU025 901	ATL8C1 1291:1 451..8 84	nap				ATL8C1 1291:1 432..8 84	0.45	g45811 45	99	309	7.6e- 24	thalia na] (AC006 919) putati ve transc riptio nal acativ ator CBF1 [Arabi dopsis thalia na]
163962	ATU025 902	ATL8C3 5623:3 233..2 330	nap				ATL8C3 5623:3 213..2 333	0.45	g41057 94	99	127	0.072	(AF049 928) PGP224 [Petun ia x hybrid a]
163963	ATU025 903	ATL8C1 1867:1 805..3 1	nap				ATL8C1 1867:1 805..3 1	0.45	g25058 76	99	342	1.1e- 25	(Y1277 6) MYB- relate d protei n [Arabi dopsis thalia na]
163964	ATU025 904	ATL8S1 5906:5 33..25	nap				ATL8S1 5906:4 67..25	0.45	g39155 10	99	310	1.9e- 29	HYPOTH ETICAL 17.7 KD PROTEI N IN

163965	ATU025 905	ATL8C4 7569:3 05..88 3	nap					ATL8C4 7569:3 05..88 3	0.44	g45859 63	99	1028	9.7e- 93	LPD 3'REGI ON. (ORF6) [Zymom onas mobili s]
163966	ATU025 906	ATL8S4 338:14 ..524	nap					ATL8S4 338:71 ..490	0.44	g27646 34	99	158	2.1e- 15	(AJ001 630) thiami ne phosph ate syntha se [Strep tomyce s livida ns]
163967	ATU025 907	ATL8C7 267:13 58..77 0	nap					ATL8C7 267:13 58..94 1	0.43	g38057 59	99	201	1.2e- 12	(AC005 693) hypoth etical protei n [Arabi dopsis thalia

163968	ATU025 908	ATL8S2 8088:1 8..548	nap				ATL8S2 8088:1 8..505	0.43		g28515 49	99		253	5.5e- 22	CSAA PROTEI N [Bacil lus subtil is]
163969	ATU025 909	ATL8C1 2568:1 294..1 775	nap				ATL8C1 2568:1 399..1 682	0.43		g46626 46	99		383	5.2e- 24	(AC006 429) hypoth etical protei n [Arabi dopsis thalia na]
163970	ATU025 910	ATL8C1 8063:6 69..10 3	nap				ATL8C1 8063:5 16..18 3	0.43		g44172 70	99		172	6.2e- 16	(AC007 019) hypoth etical protei n [Arabi dopsis thalia na]
163971	ATU025 911	ATL8C2 4887:6 48..38	nap				ATL8C2 4887:6 48..38	0.43		g25589 62	99		475	1.2e- 35	(AF025 667) histon e H2B1 [Gossy pium hirsut um]
163972	ATU025 912	ATL8C2 9091:5 21..13	nap				ATL8C2 9091:1 84..17 1	0.43		g42630 57	99		404	5.7e- 30	(AC005 142) hypoth etical

163973	ATU025 913	ATL8C3 0618:1 730..2 323	nap				ATL8C3 0618:2 135..2 210	0.43	g44690 25	99	228	3.2e- 21	proteins [Arabidopsis thaliana] (AL035602) putative protein [Arabidopsis thaliana] (AL035602) putative protein
163974	ATU025 914	ATL8C4 0816:8 15..38 7	nap				ATL8C4 0816:7 61..43 1	0.43	g36881 85	99	216	2.1e- 10	proteins [Arabidopsis thaliana] (AL031804) putative protein [Arabidopsis thaliana] (AL031804) putative protein
163975	ATU025 915	ATL8C2 4356:5 0..396 4	nap				ATL8C2 4356:5 0..290 3	0.42	g47340 12, g43098 68	99, 89	531, 317	5.9e- 22, 1.4e- 22	proteins [Arabidopsis thaliana] (AC007112) hypothetical protein [Arabidopsis thaliana] (AC007112) hypothetical protein

163976	ATU025 916	ATL8C4 4542:3 07..36 59	nap					ATL8C4 4542:5 66..36 50	0.42	g16849 13	99	2293	9.7e- 217	retro- transpo- son-like orf [Arabi dopsis thalia na]
163977	ATU025 917	ATL8S1 4977:6 71..10	nap					ATL8S1 4977:6 71..10	0.42	g33415 78	99	351	6.3e- 32	(U7788 8) recept or-like protei n kinase [Ipomo ea nil]
163978	ATU025 918	ATL8C5 494:13 ..1392	nap					ATL8C5 494:35 5..139 2	0.41	g45811 71	99	599	1.2e- 17	(AJ231 091) z29f [Vibri o choler ae] (AC006 220) putati ve glycin e rich protei n [Arabi dopsis thalia na]
163979	ATU025	ATL8S2	nap					ATL8S2	0.41	g13372	99	230	2.6e-	CHLORO

919	9969:5 53..14 0	nap					9969:4 53..29 5	0.41	g28967 71	99	112	1.7e- 08	PLAST 30S RIBOSO MAL PROTEI N S11 [Spina cia olerac ea]
163980	ATU025 920	ATL8S1 9714:4 96..15 5	nap				ATL8S1 9714:4 50..16 3	0.41	g28967 71	99	112	1.7e- 08	(AL021 899) hypoth etical protei n Rv2034 [Mycob acteri um tuberc ulosis]
163981	ATU025 921	ATL8C1 4540:8 341..1 475	nap				ATL8C1 4540:6 773..1 593, ATL8C1 4540:8 301..7 111	0.40, 0.47	g43098 65, g40380 66, g45672 98, g47739 10	99, 98, 91, 54	574, 118, 2666, 91	2.1e- 52, 0.39, 7.9e- 216, 0.0005 6	(AC006 527) hypoth etical protei n [Arabi dopsis thalia nal]; (AC005 897) hypoth etical protei n [Arabi

163984	ATU025 924	ATL8C4 3204:9 06..35 2	nap									936680 78	99	176	7.7e- 15	(AC004 667) hypoth etical protei n [Arabi dopsis thalia na]
163985	ATU025 925	ATL8C3 2016:8 34..11 6	nap									942493 80	99	465	7.0e- 43	(AC005 966) ESTs gb Z37 637, gb AA0 42498 and gb AA0 42269 come from this gene. [Arabi dopsis thalia na]
163986	ATU025 926	ATL8C4 3593:9 13..32 8	nap									945103 78	99	263		(AC007 017) hypoth etical

163995	ATU025 935	ATL8C4 2856:4 352..4 651	nap										g34452 11	99	273	2.0e- 12	influenzae Rd] (AC004 786) hypothetical protein [Arabis dopsis thaliana na]
163996	ATU025 936	ATL8S2 3670:4 57..11 3	nap										g23378 31	99	229	1.6e- 07	(Z9860 4) hypothetical protein MLCB20 52.25c [Mycobacterium leprae]
163997	ATU025 937	ATL8C4 9897:3 10..56 0	nap										g49268 17	99	103	0.015	(AC004 135) T17H7. 2 [Arabis dopsis thaliana na]
163998	ATU025 938	ATL8S5 54:159 ..486	nap										g32489 65	99	189	7.9e- 07	(AF064 958) unknown [Coxiella lla

163999	ATU025 939	ATL8C2 527:69 5..280	nap									g18711 79	99	361	3.1e- 24	burnet ii] (U9043 9) FMRFam ide precur sor isolog [Arabi dopsis thalia na]
164000	ATU025 940	ATL8C4 7245:1 444..1 083	nap									g13600 88	99	340	2.1e- 29	(X9794 7) Zn finger protei n [Nicot iana tabacu m]
164001	ATU025 941	ATL8C3 3936:8 02..13 26	nap									g38057 59	99	271		(AC005 693) hypoth etical protei n [Arabi dopsis thalia na]
164002	ATU025 942	ATL8C8 02:165 0..105 8	nap									g22136 10	99	274	2.5e- 20	(AC000 103) F21J9. 4 [Arabi dopsis thalia na]

164003	ATU025 943	ATL8C3 2408:2 034..1 618	nap						g18711 79	99	355	3.7e- 25	(U9043 9) FMRFam ide precu sor isolog [Arabi dopsis thalia na]
164004	ATU025 944	ATL8C5 820:1. .450	nap						g80929 8	99	298		Calmod ulin (Param ecium Tetrau relia) (Wild Type) []
164005	ATU025 945	ATL8S5 66:54. .332	nap						g13280 8	99	228	4.8e- 08	CHLORO PLAST 50S RIBOSO MAL PROTEI N L23 [Nicot iana tabacu m]
164006	ATU025 946	ATL8C3 5339:1 579..4 67	nap						g30986 13	99	103	4.8e- 05	(AF053 065) late embryo genesi s abunda nt protei

[illegible]

164010	ATU025 950	ATL8C4 5860:5 95...20 5	nap							g48862 75	99	91	3.5e- 07	(AL050 300) hypoth etical protei n [Arabi dopsis thalia na]
164011	ATU025 951	ATL8C3 0645:3 503...3 200	nap							g42204 78	99	174	1.1e- 15	(AC006 069) hypoth etical protei n [Arabi dopsis thalia na]
164012	ATU025 952	ATL8C2 2932:5 40...10 13	nap							g24941 17	99	130	9.2e- 11	(AC002 376) Contai ns simila rity to Papave r S3 self- incomp atibil ity protei n (gb X8 7100). [Arabi dopsis thalia

164013	ATU025 953	ATL8C4 72:392 3..567 1	nap							g47339 87	99	156	2.9e- 09	na] (AC007 209) hypo- thetical protein [Arabi- dopsis thaliana na]
164014	ATU025 954	ATL8C6 971:15 66..99 4	nap							g37859 87	99	520	1.5e- 33	(AC005 560) hypo- thetical protein [Arabi- dopsis thaliana na]
164015	ATU025 955	ATL8S1 5995:3 17..93	nap							g21298 42	99	215	4.9e- 16	SE60 protein - soybean [Glycine max]
164016	ATU025 956	ATL8C4 8311:7 40..10 90	nap							g29823 20	99	260	2.2e- 20	(AF051 245) hypo- thetical protein [Picea mariana a]
164017	ATU025 957	ATL8C3 2738:1	nap							g43097 66	99	539	1.2e- 42	(AC006 217)

	972	9483:9 ..547								15			25	ATE KINASE (SK) [Haemo philus influe nzae Rd]
164033	ATU025 973	ATL8C1 6403:5 44..25	nap							g45824 62	99	111	1.9e- 05	(AC007 071) hypoth etical protei n [Arabi dopsis thalia na]
164034	ATU025 974	ATL8C9 967:18 46..13 17	nap							g38057 59	99	243	1.5e- 17	(AC005 693) hypoth etical protei n [Arabi dopsis thalia na]
164035	ATU025 975	ATL8S2 3709:1 38..35 6	nap							g13133 2	99	111	3.7e- 06	PHOTOS YSTEM II 10 KD PHOSPH OPROTE IN [Oryza sativa]
164036	ATU025 976	ATL8C1 0319:4	nap							g18711 79	99	138		(U9043 9)

164039	ATU025 979	ATL8S7 230:92 ..391	nap							g44067 72	99	220	1.5e- 21	(AC006 836) putati ve nitril ase- associ ated protei n [Arabi dopsis thalia na]	benzod iazepi ne recept or Tspo [Helio bacill us mobili s]
164040	ATU025 980	ATL8C1 7404:1 123..8 21	nap							g48742 79	99	107	9.2e- 11	(AC007 354) ESTs gb T75 618 and gb AA4 04816 come from this gene. [Arabi dopsis thalia na]	

164046	ATU025 986	ATL8C9 521:98 1..133 9	nap										g44688 16	99	271	9.0e- 24	(AL035 601) putative protein [Arabi dopsis thalia na]
164047	ATU025 987	ATL8S2 4578:5 54..15 1	nap										g43887 25	99	544	7.0e- 43	(AC006 413) putative S1 self- incomp atibil ity protein [Arabi dopsis thalia na]
164048	ATU025 988	ATL8C7 134:80 9..128 6	nap										g30803 57	99	473	7.3e- 09	(AL022 580) hypoth etical protein [Arabi dopsis na]

164053	ATU025 993	ATL8C8 39:192 ..557	nap										g21601 34	99	564	2.3e- 27	frame [Zea mays] (AC000 375) EST gb ATT S0309 comes from this gene. [Arabi dopsis thalia na]
164054	ATU025 994	ATL8C4 7439:9 862..1 0453	nap										g30470 70	99	483	1.1e- 44	(AF058 825) No defini tion line found [Arabi dopsis thalia na]
164055	ATU025 995	ATL8S8 230:50 1..67	nap										g17310 61	99	361	7.4e- 31	HYPOTH ETICAL 16.2 KD PROTEI N IN BMRU- ANSR INTERG ENIC REGION [Bacil lus]

	998	5221:1 541...2 071									62						23	388) Simila r to gb x80 472 STS15 gene from Solanu m tubero sum. [Arabi dopsis thalia na]
164059	ATU025 999	ATL8C4 4442:1 203...9 76	nap								g45393 55	99	132	1.4e- 06	(AL049 525) putati ve protei n [Arabi dopsis thalia na]			
164060	ATU026 000	ATL8C4 4288:1 92...71 1	nap								g45586 84	99	370	4.6e- 27	(AC006 586) hypo thetical protei n [Arabi dopsis thalia na]			
164061	ATU026 001	ATL8C2 2726:7 38...93 8	nap								g15321 68	99	249	2.3e- 13	(U6381 5) locali zed			

	002	9979:9 70..67 0															32	667) hypoth etical protei n [Arabi dopsis thalia na]
164063	ATU026 003	ATL8S5 610:46 6..176	nap								g38606 68	99	207	4.2e- 10	50S RIBOSO MAL PROTEI N L28 (rpmB) [Ricke ttsia prowaz ekil]			
164064	ATU026 004	ATL8S6 94:355 ..41	nap								g17857 65	99	161	6.3e- 09	(Y0850 2) orf105 a [Arabi dopsis thalia na]			
164065	ATU026 005	ATL8C3 5107:7 779..1 0189	nap								g45586 84, g42636 55	99, 39	399, 868	8.9e- 19, 1.4e- 68	(AC006 586) hypoth etical protei n [Arabi dopsis thalia na]; (AC006			

	016	4776:5 39..34								12	39	161) putati ve leucīn e zipper trancr iption factor [Arabi dopsis thalia na]		
164077	ATU026 017	ATL8C3 2421:1 257..2 141	nap							g34452 11	99	262	5.0e- 12	(AC004 786) hypoth etical protei n [Arabi dopsis thalia na]
164078	ATU026 018	ATL8S8 082:43 5..227	nap							g22244	99	128	1.1e- 07	(X0026 3) uniden tified readin g frame [Zea mays]
164079	ATU026 019	ATL8C3 3808:6 60..92 6	nap							g30435 36	99	353	8.8e- 32	(AB000 708) SAUR [Rapha nus sativu s]
164080	ATU026	ATL8C1	nap							g49144	99	413		(AL050

164100	ATU026 040	ATL8C2 6939:5 72..10 78	nap										g23471 89	99	603	1.4e- 39	[Arabi dopsis thalia na] (AC002 338) hypoth etical protei n [Arabi dopsis thalia na]
164101	ATU026 041	ATL8C4 9957:1 66..63 0	nap										g39803 85	99	610	5.1e- 52	(AC004 561) putati ve 18 kDa class I heat shock protei n [Arabi dopsis thalia na]
164102	ATU026 042	ATL8C2 1909:1 00..36 9	nap										g43357 26	99	262	1.7e- 22	(AC006 248) putati ve revers e transc riptas e [Arabi dopsis thalia na]

164110	049	1479:5 890..5 419											35				56	224) retro ranspo son like protei n (fragm ent) [Arabi dopsis thalia na]
	ATU026 050	ATL8C2 7153:5 14..91	nap										g22136 30	99	309		2.7e- 32	(AC000 103) F21J9. 22 [Arabi dopsis thalia na]
164111	ATU026 051	ATL8C3 0934:6 33..11 69	nap										g38057 59	99	478		1.4e- 35	(AC005 693) hypoth etical protei n [Arabi dopsis thalia na]
164112	ATU026 052	ATL8C2 9931:3 879..3 393	nap										g36872 43	99	294		1.6e- 12	(AC005 169) putati ve riboso mal protei n [Arabi

164122	ATU026 062	ATL8C2 9674:6 03..16 6	nap										g33778 46	99	196	7.0e- 13	(AF076 274) No defini tion line found [Arabi dopsis thalia na]	N IN SMPA- SMPB INTERG ENIC REGION (ORF10 1) [Vibri o choler ae]
164123	ATU026 063	ATL8C4 9349:8 61..29 5	nap										g24628 34	99	592	2.1e- 54	(AF000 657) hypoth etical protei n [Arabi dopsis thalia na]	
164124	ATU026 064	ATL8C4 3392:1 91..73 1	nap										g46894 77	99	266		(AC007 213) pseud ogene [Arabi dopsis thalia na]	

164125	ATU026 065	ATL8C2 2411:4 61..86 5	nap							945586 75	99	225	9.1e- 21	na] (AC006 586) hypoth etical protein [Arabi dopsis thalia na]
164126	ATU026 066	ATL8C5 :4419. .5083	nap							g40380 66	99	578	2.6e- 28	(AC005 897) hypoth etical protein [Arabi dopsis thalia na]
164127	ATU026 067	ATL8C1 3106:4 501..4 827	nap							g45586 83	99	272	2.6e- 12	(AC006 586) putati ve retrot ranspo son Ttol ORF1 protein [Arabi dopsis thalia na]
164128	ATU026 068	ATL8C1 9862:1 051..2 88	nap							g40564 36	99	400	1.5e- 16	(AC005 990) EST gb AA6

	072	2996:1 266..7 41								79					26	9) FMRFam ide precur sor isolog [Arabi dopsis thalia na]
164133	ATU026 073	ATL8C1 3080:1 704..1 311	nap							g48369 51	99	138	1.3e- 12	(AC006 085) Hypoth etical protei n [Arabi dopsis thalia na]		
164134	ATU026 074	ATL8C4 797:11 10..70 9	nap							g45103 58	99	245	4.2e- 23	(AC006 921) putati ve touch- induce d calmod ulin [Arabi dopsis thalia na]		
164135	ATU026 075	ATL8C1 4520:9 168..8 427	nap							g33273 91	99	84	8.2e- 06	(AC004 483) hypoth etical protei n [Arabi		

164136	ATU026 076	ATL8C4 1949:1 871..2 283	nap										g18711 79	99		347	2.6e- 26	(U9043 9) FMRFam ide precu sor isolog [Arabi dopsis thalia na]
164137	ATU026 077	ATL8C1 6645:6 431..6 102	nap										g36418 68	99		392	5.3e- 34	(AJ011 012) hypoth etical protei n [Cicer arieti num]
164138	ATU026 078	ATL8C1 4808:5 340..5 549	nap										g10228 11	99		316	2.8e- 18	(U3770 3) ORF 62 [Horde um vulgar el]
164139	ATU026 079	ATL8C4 2456:1 286..1 950	nap										g45586 84	99		303	1.5e- 18	(AC006 586) hypoth etical protei n [Arabi dopsis thalia na]

164140	ATU026 080	ATL8C1 980:26 53..17 21	nap							g46783 26	99	381	6.4e- 26	(AL049 658) hypoth etical protei n [Arabi dopsis thalia na]
164141	ATU026 081	ATL8C1 4133:1 14..64 1	nap							g26424 30	99	782	1.3e- 63	(AC002 391) putati ve AP2 domain contai ning protei n [Arabi dopsis thalia na]
164142	ATU026 082	ATL8C2 4653:1 95..49 7	nap							g14208 87	99	173	7.6e- 10	(U3433 4) non- specif ic lipid transf er- like protei n [Phase olus vulgar is]
164143	ATU026 083	ATL8S2 3016:3	nap							g28515 49	99	254	5.2e- 23	CSAA PROTEI

164151	ATU026 091	ATL8C3 2220:1 063..3 48	nap									g33778 09	99	798	4.5e- 55	dopsis thalia nal (AF075 597) contai ns simila rity to SRF- type transc riptio n factor s (DNA- bindin g and dimeri zation domain) (PFam: transc ript f act.hm m, score: 15.85) [Arabi dopsis thalia nal (AC005 309) unknow n protei
164152	ATU026 092	ATL8C1 9718:2 70..76 2	nap									g37382 85	99	380	2.3e- 36	dopsis thalia nal (AC005 309) unknow n protei

164153	ATU026 093	ATL8C1 0780:2 41..60 2	nap										g28326 73	99	385	1.6e- 41	n [Arabi dopsis thalia nal] (AL021 712) hypoth etical protei n [Arabi dopsis thalia nal]
164154	ATU026 094	ATL8C6 031:10 8..522	nap										g16225	99	614	2.4e- 61	(Z1202 3) calmod ulin [Arabi dopsis thalia nal]
164155	ATU026 095	ATL8C1 3033:9 39..72 9	nap										g22244	99	77	0.0012	(X0026 3) uniden tified readin g frame [Zea mays]
164156	ATU026 096	ATL8C1 3016:1 2327.. 13423	nap										g11748 53	99	398	1.8e- 33	UBIQUI TIN- CONJUG ATING ENZYME E2-18 KD (UBIQU

164160	ATU026 100	ATL8S1 8793:6 6..469	nap							g24626 40	99	363	6.5e- 31	(Y1337 0) revers e transc riptas e [Oryza sativa]	protei n [Arabi dopsis thalia na]; (AF147 259) No defini tion line found [Arabi dopsis thalia na]
164161	ATU026 101	ATL8C9 10:133 0..890	nap							g36881 85	99	350	1.5e- 30	(AL031 804) putati ve protei n [Arabi dopsis thalia na]	protei n [Arabi dopsis thalia na]
164162	ATU026 102	ATL8C4 8995:8 07..29	nap							g45103 61	99	198	1.1e- 20	(AC007 017) putati	(AC007 017) putati

164163	ATU026 103	ATL8C2 5246:1 183..1 401	nap										g30045 62	99	353	4.4e- 20	(AC003 673) hypoth etical protein [Arabi dopsis thalia na]
164164	ATU026 104	ATL8C3 109:55 7..170	nap										g45824 62	99	103	0.11	(AC007 071) hypoth etical protein [Arabi dopsis thalia na]
164165	ATU026 105	ATL8C1 6707:1 630..7 92	nap										g29824 35	99	418	3.0e- 41	(AL022 224) retrot ranspo son like protein (fragm ent)

164166	ATU026 106	ATL8C9 817:24 11..18 18	nap									945586 84	99		368	1.0e- 18	(AC006 586) hypoth etical protei n [Arabi dopsis thalia na]
164167	ATU026 107	ATL8S9 973:10 2..341	nap									g47411 88	99		102	1.0e- 08	(AL049 746) hypoth etical protei n [Arabi dopsis thalia na]
164168	ATU026 108	ATL8C2 3421:1 138..1 570	nap									g18711 79	99		135	4.7e- 07	(U9043 9) FMRFam ide precur sor isolog [Arabi dopsis thalia na]
164169	ATU026 109	ATL8C1 220:12 06..79	nap									g32585 71	99		704	1.3e- 61	(U8995 9) Hypoth etical protei

164179	ATU026 119	ATL8C3 9183:3 124..3 915	nap						g33778 09	99	361	2.8e- 33	(AF075 597) contai ns simila rity to SRF- type transc riptio n factor s (DNA- bindin g and dimeri zation domain) (PFam: transc ript_f act.hm m, score: 15.85) [Arabi dopsis thalia na]
164180	ATU026 120	ATL8C6 235:50 5..92	nap						g18711 79	99	246	1.8e- 12	(U9043 9) FMRFam ide precu sor isolog [Arabi

164181	ATU026 121	ATL8C1 4018:5 69..11 83	nap										g44540 13	99	541	8.3e- 44	(AL035 396) putati ve protei n [Arabi dopsis thalia na]
164182	ATU026 122	ATL8C1 6932:7 69..10 79	nap										g42189 89	99	349	5.6e- 34	(AF098 631) putati ve cell wall- plasma membra ne discon nectin g CLCT protei n [Arabi dopsis thalia na]
164183	ATU026 123	ATL8C4 039:27 30..23 47	nap										g45876 13	99	93	9.7e- 06	(AC006 951) hypoth etical protei n [Arabi dopsis thalia na]

[illegible]

164184	ATU026 124	ATL8C3 712:32 7..833	nap								g35488 11	99	714	1.8e- 55	na] (AC005 313) kineto chore (SKP1p) -like protei n [Arabi dopsis thalia na]
164185	ATU026 125	ATL8C2 2287:2 941..2 364	nap								g45876 13	99	75	0.0010	(AC006 951) hypoth etical protei n [Arabi dopsis thalia na]
164186	ATU026 126	ATL8C4 8909:5 34..91	nap								g23985 33	99	256	7.le- 24	(YI372 5) Transc riptio n factor [Arabi dopsis thalia na]
164187	ATU026 127	ATL8C3 7122:6 43..89 1	nap								g21298 04	99	376		pollen allerg en Bra r II (clone 921) - turnip

Sample	Temperature (°C)	Time (h)	Yield (%)	Structure
1	100	1	100	
2	100	2	100	
3	100	3	100	
4	100	4	100	
5	100	5	100	
6	100	6	100	
7	100	7	100	
8	100	8	100	
9	100	9	100	
10	100	10	100	
11	100	11	100	
12	100	12	100	
13	100	13	100	
14	100	14	100	
15	100	15	100	
16	100	16	100	
17	100	17	100	
18	100	18	100	
19	100	19	100	
20	100	20	100	
21	100	21	100	
22	100	22	100	
23	100	23	100	
24	100	24	100	
25	100	25	100	
26	100	26	100	
27	100	27	100	
28	100	28	100	
29	100	29	100	
30	100	30	100	
31	100	31	100	
32	100	32	100	
33	100	33	100	
34	100	34	100	
35	100	35	100	
36	100	36	100	
37	100	37	100	
38	100	38	100	
39	100	39	100	
40	100	40	100	
41	100	41	100	
42	100	42	100	
43	100	43	100	
44	100	44	100	
45	100	45	100	
46	100	46	100	
47	100	47	100	
48	100	48	100	
49	100	49	100	
50	100	50	100	

164192	ATU026 132	ATL8C4 8904:3 1..485	nap							g40380 39	99	252	2.3e- 18	(AC005 936) putati ve protei nase inhibi tor II [Arabi dopsis thalia na]	[Nicot iana tabacu m]
164193	ATU026 133	ATL8C5 276:22 6..624	nap							g30969 29	99	163	2.9e- 15	(AL023 094) putati ve protei n [Arabi dopsis thalia na]	
164194	ATU026 134	ATL8C1 3962:7 771..7 273	nap							g44328 09	99	531	2.3e- 50	(AC006 570) putati ve Athila retroeo lement ORF1 protei n [Arabi dopsis thalia na]	

164195	ATU026 135	ATL8C1 3962:2 384..4 073	nap							g47339 87	99	143	1.1e- 08	(AC007 209) hypoth etical protei n [Arabi dopsis thalia na]
164196	ATU026 136	ATL8C1 1510:3 34..74 1	nap							g28326 26	99	227	2.5e- 21	(AL021 711) hypoth etical protei n [Arabi dopsis thalia na]
164197	ATU026 137	ATL8C2 4354:1 525..1 103	nap							g18711 79	99	285	3.2e- 20	(U9043 9) FMRFam ide precu sor isolog [Arabi dopsis thalia na]
164198	ATU026 138	ATL8C5 13:562 ..1234	nap							g54442 1, g34027 11	99, 47	153, 170	0.56, 3.6e- 13	GLYCIN E-RICH RNA- BINDIN G PROTEI N 1 [Sorgh um]

164199	ATU026 139	ATL8C3 1455:1 86..60 5	nap										g16174 71	99	383	2.3e- 17	(X9760 4) ORFI [Zea diplop erennis]	bicol orl; (AC004 261) putati ve RNA- bindin g protei n [Arabi dopsis thalia na]
164200	ATU026 140	ATL8C4 3908:5 52..18 0	nap										g45824 62	99	147		(AC007 071) hypoth etical protei n [Arabi dopsis thalia na]	
164201	ATU026 141	ATL8C1 3940:1 0162.. 8846	nap										g17857 37	99	118	2.5e- 07	(Y0850 2) orf109 b [Arabi dopsis thalia na]	

164202	ATU026 142	ATL8C2 77:321 ..1560	nap							g47739 02	99	405	7.6e- 19	(AF074 021) hypoth etical protei n [Arabi dopsis thalia na]
164203	ATU026 143	ATL8S1 3454:2 0..457	nap							g24963 34	99	167	5.3e- 14	HYPOTH ETICAL PROTEI N MG221 HOMOLO G [Mycop lasma pneumo niae]
164204	ATU026 144	ATL8S1 9895:9 ..311	nap							g42204 78	99	237	5.3e- 21	(AC006 069) hypoth etical protei n [Arabi dopsis thalia na]
164205	ATU026 145	ATL8C1 8072:4 60..15 2	nap							g37382 99	99	460	7.5e- 43	(AC005 309) putati ve glutar edoxin [Arabi dopsis thalia na]

164206	ATU026 146	ATL8C1 9376:6 42..15 1	nap									g54858 9	99	414	4.6e- 38	na] PATHOG ENESIS - RELATE D PROTEI N PRB1-3 PRECUR SOR (PR- 1B) (HV-8) [Horde um vulgar e]
164207	ATU026 147	ATL8C1 5470:1 478..1 050	nap									g30969 44	99	307	6.8e- 26	(AL023 094) putati ve protei n [Arabi dopsis thalia na]
164208	ATU026 148	ATL8S1 9951:5 79..1	nap									g33226 50	99	124	2.7e- 08	(AE001 216) genera l stress protei n (ctc) [Trepo nema pallid um]

164209	ATU026 149	ATL8C7 73:105 ..860	nap							g34200 60	99	607	1.4e- 22	(AC004 680) hypoth etical protein [Arabi dopsis thalia na]
164210	ATU026 150	ATL8S1 8131:3 89..9	nap							g24941 17	99	648	4.7e- 50	(AC002 376) Contai ns simila rity to Papave r S3 self- incomp atibil ity protein (gb X8 7100). [Arabi dopsis thalia na]
164211	ATU026 151	ATL8C4 3888:1 261..8 04	nap							g30803 57	99	506		(AL022 580) hypoth etical protein [Arabi dopsis thalia na]

164216	ATU026 156	ATL8C4 6642:3 60..93 8	nap										g26424 30	99	398	3.4e- 45	trans isomer ase B [Metha nobact erium thermo autotr ophicu m] (AC002 391) putati ve AP2 domain contai ning protei n [Arabi dopsis thalia na]
164217	ATU026 157	ATL8C4 3860:4 11..40	nap										g48836 19	99	437		(AC006 922) hypothe tical protei n [Arabi dopsis thalia na]
164218	ATU026 158	ATL8C1 0665:1 233..1 484	nap										g31766 88	99	212		(AC003 671) F1707. 20 [Arabi dopsis thalia na]

164224	ATU026 164	ATL8C4 1788:9 107..8 318	nap									g17857 37	99	117	7.5e- 08	[Arabi dopsis thalia na]
164225	ATU026 165	ATL8C2 3854:1 508..4 71	nap									g36954 11	99	477	2.9e- 59	(Y0850 2) orf109 b [Arabi dopsis thalia na]
164226	ATU026 166	ATL8C2 3855:1 387..1 033	nap									g37790 23	99	119	3.0e- 06	(AC005 171) probab le splici ng factor [Arabi dopsis thalia na]
164227	ATU026 167	ATL8C3 1287:2 39..86 0	nap									g11470 4, g11445 5	99, 42	650, 223	3.2e- 52, 2.6e- 19	ATP SYNTHA SE PROTEI N I [Pseud omonas

164228	ATU026 168	ATL8C4 3852:2 373..1 887	nap								g14835 76	99	168			(X9972 3) brahma protei n [Rattu s norveg icus]	putida]; ATP SYNTHA SE A CHAIN (PROTE IN 6) [Pseud omonas putida]
164229	ATU026 169	ATL8S1 3139:4 17..76	nap								g17086 28	99	196	1.6e- 07		DIACYL GLYCER OL KINASE (DAGK) (DIGLY CERIDE KINASE) (DGK) [Bacil lus subtil is]	
164230	ATU026 170	ATL8S9 641:34 2..10	nap								g29953 19	99	218	6.5e- 16		(AL022 268) transc riptio nal regula	

Species	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75	2075-76	2076-77	2077-78	2078-79	2079-80	2080-81	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05	2105-06	2106-07	2107-08	2108-09	2109-10	2110-11	2111-12	2112-13	2113-14	2114-15	2115-16	2116-17	2117-18	2118-19	2119-20	2120-21	2121-22	2122-23	2123-24	2124-25	2125-26	2126-27	2127-28	2128-29	2129-30	2130-31	2131-32	2132-33	2133-34	2134-35	2135-36	2136-37	2137-38	2138-39	2139-40	2140-41	2141-42	2142-43	2143-44	2144-45	2145-46	2146-47	2147-48	2148-49	2149-50	2150-51	2151-52	2152-53	2153-54	2154-55	2155-56	2156-57	2157-58	2158-59	2159-60	2160-61	2161-62	2162-63	2163-64	2164-65	2165-66	2166-67	2167-68	2168-69	2169-70	2170-71	2171-72	2172-73	2173-74	2174-75	2175-76	2176-77	2177-78	2178-79	2179-80	2180-81	2181-82	2182-83	2183-84	2184-85	2185-86	2186-87	2187-88	2188-89	2189-90	2190-91	2191-92	2192-93	2193-94	2194-95	2195-96	2196-97	2197-98	2198-99	2199-00	2200-01	2201-02	2202-03	2203-04	2204-05	2205-06	2206-07	2207-08	2208-09	2209-10	2210-11	2211-12	2212-13	2213-14	2214-15	2215-16	2216-17	2217-18	2218-19	2219-20	2220-21	2221-22	2222-23	2223-24	2224-25	2225-26	2226-27	2227-28	2228-29	2229-30	2230-31	2231-32	2232-33	2233-34	2234-35	2235-36	2236-37	2237-38	2238-39	2239-40	2240-41	2241-42	2242-43	2243-44	2244-45	2245-46	2246-47	2247-48	2248-49	2249-50	2250-51	2251-52	2252-53	2253-54	2254-55	2255-56	2256-57	2257-58	2258-59	2259-60	2260-61	2261-62	2262-63	2263-64	2264-65	2265-66	2266-67	2267-68	2268-69	2269-70	2270-71	2271-72	2272-73	2273-74	2274-75	2275-76	2276-77	2277-78	2278-79	2279-80	2280-81	2281-82	2282-83	2283-8
---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	--------

164231	ATU026 171	ATL8S2 417:73 ..403	nap							g30250 72	99	102	1.2e- 06	HYPOTH ETICAL 12.4 KD PROTEI N IN MINC- SHEA INTERG ENIC REGION [Esche richia coli]	tor [Strep tomyce s coelic olor]
164232	ATU026 172	ATL8C1 3692:1 815..1 414	nap							g48877 43	99	604	4.3e- 58	(AC006 533) hypoht etical protei n [Arabi dopsis thalia na]	(AC006 533) hypoht etical protei n [Arabi dopsis thalia na]
164233	ATU026 173	ATL8C1 0185:3 417..2 896	nap							g44552 19	99	192		(AL035 440) hypoht etical protei n [Arabi dopsis thalia na]	(AL035 440) hypoht etical protei n [Arabi dopsis thalia na]

164234	ATU026 174	ATL8C2 3945:1 185..1 487	nap									g38941 85	99	137	2.9e- 05	(AC005 662) unknown protein [Arabi dopsis thalia na]
164235	ATU026 175	ATL8C4 8705:9 87..43 3	nap									g11731 84	99	145	1.5e- 12	CHLORO PLAST 30S RIBOSO MAL PROTEI N S12 [Cuscu ta europa ea]
164236	ATU026 176	ATL8C8 96:163 1..700	nap									g33778 09	99	489	7.8e- 33	(AF075 597) contains similarity to SRF- type transcription factor (DNA- binding and dimerization)

164237	ATU026 177	ATL8C4 7084:5 176..5 736	nap							g48039 18	99	610	4.1e- 32	(AC006 219) hypoth etical protein [Arabi dopsis thalia na]
164238	ATU026 178	ATL8S2 6114:3 41..14	nap *							g24945 47	99	116	5.5e- 08	FLAGEL LAR HOOK- BASAL BODY COMPLE X PROTEI N FLIE [Pseud omonas aerugi nos]
164239	ATU026 179	ATL8C7 82:953 ..744	nap							g22244	99	97	0.0006 1	(X0026 3) uniden tified

164244	183	820:73 1..465								26						16	248) putati ve revers e transc riptas e [Arabi dopsis thalia na]
	ATU026 184	ATL8C6 661:35 9..659	nap							g22449 24	99		332	1.0e- 20	(Z9733 9) glutar edoxin [Arabi dopsis thalia na]		
164245	ATU026 185	ATL8C4 3817:1 050..1 830	nap							g18711 79	99		419		(U9043 9) FMRFam ide precur sor isolog [Arabi dopsis thalia na]		
164246	ATU026 186	ATL8C1 4758:5 035..4 730	nap							g34452 11	99		360	4.8e- 33	(AC004 786) hypoth etical protei n [Arabi dopsis thalia		

164247	ATU026 187	ATL8C1 4759:3 553...3 801	nap							913131 0	99		112	3.5e- 05	na] CYTOCH ROME B559 ALPHA CHAIN [Nicot iana tabacu m]
164248	ATU026 188	ATL8C1 9129:1 047...7 65	nap							946783 51	99		254	1.1e- 22	(AL049 659) putati ve protei n [Arabi dopsis thalia na]
164249	ATU026 189	ATL8C7 933:38 0..753	nap							933554 83	99		375	8.5e- 21	(AC004 218) gibber ellin- regula ted protei n (GASA5) -like [Arabi dopsis thalia na]
164250	ATU026 190	ATL8C1 4764:2 409...1 094	nap							918711 79	99		277	3.5e- 14	(U9043 9) FMRFam ide precu sor

164251	ATU026 191	ATL8C2 2098:5 98...24 8	nap									g29807 78	99	584	1.6e- 51	isolog [Arabi dopsis thalia na] (AL022 198) hypoth etical protei n [Arabi dopsis thalia na]
164252	ATU026 192	ATL8S2 0779:4 99...88	nap									g48369 51	99	198	4.8e- 20	(AC006 085) Hypoth etical protei n [Arabi dopsis thalia na]
164253	ATU026 193	ATL8C1 7879:1 096..7 99	nap									g36680 78	99	308		(AC004 667) hypoth etical protei n [Arabi dopsis thalia na]
164254	ATU026 194	ATL8S1 2858:1 07..41 2	nap									g45875 76	99	418	2.2e- 38	(AC006 550) Strong simila rity

164255	ATU026 195	ATL8C3 0432:1 189..2 062	nap											g23427 32	99	120	0.66	(AC002 341) hypoth etical protei n [Arabi dopsis thalia na]	to gb Z49 699 glutar edoxin from Ricin s commun is. [Arabi dopsis thalia na]
164256	ATU026 196	ATL8S1 7096:3 83..15 9	nap											g76971 7	99	194	9.4e- 10	(D3205 2) ORF76B [Oryza sativa]	(D3205 2) ORF76B [Oryza sativa]
164257	ATU026 197	ATL8C3 8411:2 163..2 796	nap											g42630 47	99	79	0.0049	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]

164258	ATU026 198	ATL8C3 0480:1 05..61 0	nap							g45811 06	99	488	1.1e- 23	(AC005 825) putati ve protei n kinase [Arabi dopsis thalia na]
164259	ATU026 199	ATL8C2 4224:8 97..30 97	nap							g45394 53, g45394 52	99, 72	230, 1419	2.1e- 23, 1.8e- 150	(AL049 500) putati ve protei n [Arabi dopsis thalia na]; (AL049 500) putati ve phosph oribos ylanth ranila te transf erases [Arabi dopsis thalia na]
164260	ATU026 200	ATL8C4 0738:4 83..18 4	nap							g36680 78	99	327	3.4e- 29	(AC004 667) hypoth etical

164261	ATU026 201	ATL8C4 1736:4 97..25 5	nap							g81099	99	90	8.2e- 06	protein [Arabi dopsis thalia na]
164262	ATU026 202	ATL8C4 6704:4 01..79 7	nap							g45824 66	99	131	6.5e- 12	hypoth etical protein n 4 (5S rRNA 3' region) - Desulf urococ cus mobili s (fragm ent) [Desul furoco ccus mobili s]
164263	ATU026 203	ATL8C9 871:58 7..89	nap							g46626 50	99	163	7.6e- 16	unknown protein n [Arabi dopsis thalia na]
														(AC006 419) hypoth

164264	ATU026 204	ATL8C3 4356:1 521..1 040	nap										g44552 82	99	111	0.97	et al protein [Arabidopsis thaliana]
164265	ATU026 205	ATL8C2 4815:3 33..60 2	nap										g30435 36	99	326	4.4e- 31	(AB000 708) SAUR [Raphanus sativus]
164266	ATU026 206	ATL8C3 1389:2 49..46 7	nap										g18256 45	99	305	1.9e- 26	(U8817 3) weak similarity to Arabidopsis thaliana ubiquitin- like protein 8 [Caenorhabditis elegans]

164271	ATU026 211	ATL8S5 143:50 6..60	nap									g14025 1	99	383	1.4e- 35	na] HYPOTH ETICAL 17.2 KD PROTEI N IN TSX- RIBG INTERG ENIC REGION (ORF1) [Esche richia coli]
164272	ATU026 212	ATL8C1 3566:5 759..6 162	nap									g33273 91	99	228	2.9e- 12	(AC004 483) hypoth etical protei n [Arabi dopsis thalia na]
164273	ATU026 213	ATL8C1 6809:9 48..49 7	nap									g43098 65	99	158	1.3e- 13	(AC006 527) hypoth etical protei n [Arabi dopsis thalia na]
164274	ATU026 214	ATL8C1 681:16 9..679	nap									g44689 82	99	477	2.7e- 34	(AL035 605) putati ve

164275	ATU026 215	ATL8S3 0111:1 2..384	nap									g11728 47	99	156	6.7e- 11	RIBOSO ME- BINDIN G FACTOR A [Haemo philus influe nzae Rd]	protei n [Arabi dopsis thalia na]
164276	ATU026 216	ATL8C1 4776:1 1174.. 12907	nap									g47339 87	99	152	2.0e- 07	(AC007 209) hypoth etical protei n [Arabi dopsis thalia na]	
164277	ATU026 217	ATL8C2 4966:6 02..16 5	nap									g28326 47	99	181	1.8e- 21	(AL021 710) hypoth etical protei n [Arabi dopsis thalia na]	
164278	ATU026 218	ATL8C3 2027:1 088..1	nap									g21467 40	99	463	1.7e- 33	inner mitoch ondria	

164282	ATU026 222	ATL8C1 0908:2 970..2 489	nap									g29824 35	99	291	4.4e- 30	unknown protein [Arabidopsis thaliana]
164283	ATU026 223	ATL8S2 462:25 0..540	nap									g54356 5	99	215	2.9e- 18	hypothetical 10.0K protein - Zinnia elegans [Zinnia elegans]
164284	ATU026 224	ATL8C3 0580:8 30..62 4	nap									g15321 67	99	135	0.0008 5	(U6381 5) localized according to

[illegible][illegible]

164289	ATU026 229	80..59 5	nap										99	230	1.9e- 14	TOM7 protei n [Solan um tubero sum] (AC004 512) T8F5.2 0 [Arabi dopsis thalia nal]
164290	ATU026 230	ATL8C3 8074:5 800..6 156	nap										99	5480	0.0	(AC006 528) putati ve pol polypr oteins with a Zn- finger CCHC type domain (prosi te:QDO C50158) and a DDE integr ase signat ure motif [Arabi dopsis thalia

164291	ATU026 231	ATL8C3 0628:1 079..1	nap				ATL8C3 0628:1 079..5 0	0.97	g26186 94	98	1376	1.4e- 129	{AC002 510) putati ve zinc- finger protei n [Arabi dopsis thalia na]
164292	ATU026 232	ATL8C4 0093:3 65..22 8	nap				ATL8C4 0093:3 65..25 2	0.96	g28946 09	98	187	1.9e- 14	(AL021 889) hypoth etical protei n [Arabi dopsis thalia na]
164293	ATU026 233	ATL8C3 0374:2 754..8 07	nap				ATL8C3 0374:2 425..8 25	0.96	g23179 08	98	549	2.6e- 58	(U8995 9) Unknow n protei n [Arabi dopsis thalia na]
164294	ATU026 234	ATL8C4 7086:8 47..1	nap				ATL8C4 7086:8 47..16 5	0.94	g40380 66	98	463	2.1e- 26	(AC005 897) hypoth etical protei n [Arabi

164295	ATU026 235	ATL8C4 7838:3 57..10 94	nap						0.92	g45843 53	98	90	0.0006 6	dopsis thalia nal (AC006 420) unknow n protei n [Arabi dopsis thalia nal]
164296	ATU026 236	ATL8C3 0525:3 537..1	nap						0.86	g21911 95	98	2784	3.1e- 230	(AF007 271) contai ns simila rity to T. cruzi 3' end fragme nt (PID:g 161956) [Arabi dopsis thalia nal]
164297	ATU026 237	ATL8S1 5832:6 4..204	nap						0.84	g29807 63	98	206	1.4e- 16	(AL022 198) putati ve protei n [Arabi dopsis thalia nal]

164298	ATU026 238	ATL8C3 3308:1 93..66 4	nap				ATL8C3 3308:1 93..66 4	0.81	g39158 23	98	147	7.4e- 07	na] [Segme nt 1 of 2] 60S RIBOSO MAL PROTEI N L5 []
164299	ATU026 239	ATL8C4 5701:2 65..16 28	nap				ATL8C4 5701:1 564..1 281	0.81	g42621 60	98	316	2.1e- 34	(AC005 275) putati ve chloro plast protei n import compon ent [Arabi dopsis thalia na]
164300	ATU026 240	ATL8C1 1030:1 24..16 69	nap				ATL8C1 1030:1 73..15 62	0.80	g45875 26	98	1282	7.0e- 119	(AC007 060) Strong simila rity to F19I3. 2 []
164301	ATU026 241	ATL8C3 1161:5 03..66 5	nap				ATL8C3 1161:5 09..58 4	0.79	g25058 80	98	115	6.1e- 09	(Y1277 6) hypoth etical protei n [Arabi

164302	ATU026 242	ATL8C4 6624:1 ..3497	nap					ATL8C4 6624:1 147..3 497	0.79	g39246 09	98	2375	0.0	dopsis. thalia na] (AF069 442) putati ve polypr oteins of LTR transp oson [Arabi dopsis thalia na]
164303	ATU026 243	ATL8C1 9987:1 11..61 7	nap					ATL8C1 9987:4 46..61 7	0.79	g88608 2	98	172	0.16	(U2718 2) RNA polyme rase II larges t subuni t [Sacch aromyc es cerevi siae]
164304	ATU026 244	ATL8C4 0360:1 ..1857	nap					ATL8C4 0360:2 44..15 42	0.77	g42637 66	98	2291	1.7e- 221	(AC006 218) hypoth etical protei n [Arabi dopsis thalia na]

164305	ATU026 245	ATL8C2 2483:1 602..2 29	nap				ATL8C2 2483:1 339..2 44	0.76	g39280 90	98	1064	7.8e- 69	(AC005 770) putati ve MTN3 protei n [Arabi dopsis thalia na]
164306	ATU026 246	ATL8C5 961:26 20..1	nap				ATL8C5 961:26 20..37	0.75	g46801 80	98	2086		(AF111 709) polypr oteins [Oryza sativa subsp. indica]
164307	ATU026 247	ATL8C3 1868:3 741..9 88	nap				ATL8C3 1868:3 741..9 88	0.75	g48357 77	98	268	0.54	(AC007 296) F25C20 .5 [Arabi dopsis thalia na]
164308	ATU026 248	ATL8C2 036:27 12..1	nap				ATL8C2 036:25 56..48 2	0.74	g48951 68	98	527	9.2e- 38	(AC007 662) putati ve replac ation protei n Al [Arabi dopsis thalia na]

164309	ATU026 249	ATL8C2 3159:1 ..1192	nap				ATL8C2 3159:3 76..11 92	0.73	g48368 95	98	528	9.1e- 61	(AC007 369) Hypoth etical protei n [Arabi dopsis thalia na]
164310	ATU026 250	ATL8C4 971:82 7..331 5	nap				ATL8C4 971:83 0..325 0	0.72	g44690 24	98	2764	1.8e- 289	(AL035 602) putati ve protei n [Arabi dopsis thalia na]
164311	ATU026 251	ATL8C4 502:42 20..22 48	nap				ATL8C4 502:42 12..22 48	0.68	g40637 41	98	1289	1.4e- 127	(AC005 851) putati ve Na/H antipo rter [Arabi dopsis thalia na]
164312	ATU026 252	ATL8S2 5048:1 70..59 6	nap				ATL8S2 5048:1 70..37 1	0.67	g32198 86	98	137	5.6e- 08	HYPOTH ETICAL TRANSC RIPTIO NAL REGULA TOR MJ0272 []

164313	ATU026 253	ATL8C1 4097:1 41..14 99	nap				ATL8C1 4097:1 69..14 99	0.66	g45843 53	98	99	0.0001 1	(AC006 420) unknown protein [Arabi dopsis thalia na]
164314	ATU026 254	ATL8C9 272:40 07..10 292	nap				ATL8C9 272:40 07..82 61, ATL8C9 272:10 091..8 684	0.64, 0.75	g42638 31	98	5198		(AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia na]
164315	ATU026 255	ATL8C4 5545:1 775..1 53	nap				ATL8C4 5545:1 695..1 53	0.63	g14653 68	98	945	3.4e- 117	(X9954 8) bHLH protein [Arabi dopsis thalia na]
164316	ATU026 256	ATL8C4 7547:1 487..1	nap				ATL8C4 7547:1 453..1 29	0.62	g21604 54	98	915	2.8e- 96	(L3712 6) GA4 [Arabi dopsis thalia na]
164317	ATU026 257	ATL8C3 7441:3	nap				ATL8C3 7441:3	0.60	g37864 96	98	90		(AF098 993)

164318	ATU026 258	ATL8C1 6432:1 ..2041	nap					945..1 843	0.60	g40637 41	98	1204	9.9e- 124	No defini tion line found [Caeno rhabdi tis elegan s]
								ATL8C1 6432:2 31..20 41	0.60	g40637 41	98	1204	9.9e- 124	(AC005 851) putati ve Na/H antipo rter [Arabi dopsis thalia na]
164319	ATU026 259	ATL8C1 757:14 27..1	nap					ATL8C1 757:92 3..394	0.60	g49143 58	98	370	3.2e- 41	(AC007 289) hypoth etical protei n [Arabi dopsis thalia na]
164320	ATU026 260	ATL8C4 3448:1 ..761	nap					ATL8C4 3448:5 59..75 3	0.60	g30803 58	98	790		(AL022 580) hypoth etical protei n [Arabi dopsis thalia na]

164321	ATU026 261	ATL8S1 5684:2 61..92	nap				ATL8S1 5684:2 61..92	0.58	g21044 12	98	206	3.3e- 10	na] (Z9539 0) hypoth etical protei n Rv3489 [Mycob acteri um tuberc ulosis]
164322	ATU026 262	ATL8C4 8016:7 75..47 0	nap				ATL8C4 8016:6 74..47 0	0.58	g37383 00	98	448	7.1e- 42	(AC005 309) putati ve glutar edoxin [Arabi dopsis thalia na]
164323	ATU026 263	ATL8C9 109:57 ..572	nap				ATL8C9 109:57 ..474	0.57	g10089 0	98	114		hypoth etical protei n - maize []
164324	ATU026 264	ATL8S2 0687:8 7..465	nap				ATL8S2 0687:8 7..465	0.57	g38610 12	98	131	3.4e- 08	(AJ235 271) RIBOSO MAL PROTEI N L36 (rpmJ) [Ricke ttsia prowaz

164325	ATU026 265	ATL8C3 0752:5 016..5 365	nap				ATL8C3 0752:5 016..5 365	0.55	g30045 46	98	169	5.6e- 10	ekil] (AC003 673) hypoth etical protei n [Arabi dopsis thalia na]
164326	ATU026 266	ATL8S1 050:34 5..44	nap				ATL8S1 050:23 0..44	0.54	g45843 53	98	90	5.4e- 05	(AC006 420) unknow n protei n [Arabi dopsis thalia na]
164327	ATU026 267	ATL8C4 0684:3 647..1 40	nap				ATL8C4 0684:3 356..1 69	0.53	g43888 25, g43887 24	98, 43	1886, 84	6.6e- 188, 1.5e- 05	(AC006 528) putati ve pol ypr otei n with revers e transc riptas e domain (Pfam: PF0007 8) [Arabi dopsis thalia

164328	ATU026 268	ATL8C3 282:22 86..1	nap							ATL8C3 282:21 93..31 2	0.52					g32427 13	98	2442	4.3e- 226	na]; (AC006 413) putati ve Athila ORF1 protei n [Arabi dopsis thalia na]
164329	ATU026 269	ATL8C1 505:79 5..627	nap							ATL8C1 505:73 2..633	0.52					g45067 17	98	126	1.9e- 09	riboso mal protei n S29 [Homo sapien s]
164330	ATU026 270	ATL8C4 7301:1 135..1	nap							ATL8C4 7301:1 080..5 85	0.49					g46783 02	98	290	2.1e- 35	(AL049 655) putati ve protei n [Arabi dopsis thalia na]

164331	ATU026 271	ATL8C2 3827:1 ..1255	nap			ATL8C2 3827:2 10..90 6	0.46	g45443 96	98	1020	9.9e- 107	(AC007 047) hypoth etical protei n [Arabi dopsis thalia na]
164332	ATU026 272	ATL8S2 3667:2 84..87	nap					g24956 41	98	181	1.2e- 13	HYPOTH ETICAL 7.8 KD PROTEI N IN PEPB- FDX INTERG ENIC REGION [Pseud omonas aerugi nosa]
164333	ATU026 273	ATL8C2 2394:1 584..1 796	nap					g47339 63	98	212	0.998	(AC007 261) unknow n protei n [Arabi dopsis thalia na]
164334	ATU026 274	ATL8C4 0698:4 44..29 4	nap					g45843 53	98	97	1.0e- 05	(AC006 420) unknow n protei n

164335	ATU026 275	ATL8C3 1462:3 882..4 593	nap							98	126	1.5e- 10	[Arabi dopsis thalia na] (AC005 970) hypoth etical protei n [Arabi dopsis thalia na]
164336	ATU026 276	ATL8S9 818:13 7..255	nap							98	149	2.2e- 09	hypoth etical protei n (B2 elemen t) - mouse []
164337	ATU026 277	ATL8S2 4215:4 17..1	nap							98	151	2.4e- 07	(AI021 411) hypoth etical protei n SC7H1. 25c [Strep tomyce s coelic olor]
164338	ATU026 278	ATL8C2 4775:1 613..1 464	nap							98	200	2.8e- 14	defens in AMP1 - Dahlia mercki

																		i [Dahli a mercki i, seeds, Peptid e, 50 aa]
164339	ATU026 279	ATL8C1 0522:6 11..45 0	nap										g19148 70	98	113			(Z8200 1) unknow n [Strep tococc us pneumo niae]
164340	ATU026 280	ATL8C9 11:468 ..590	nap										g48504 07	98	93	0.0003 8		(AC007 357) EST gb T21 221 comes from this gene. [Arabi dopsis thalia na]
164341	ATU026 281	ATL8S8 101:46 ..548	nap										g42630 57	98	354	9.0e- 22		(AC005 142) hypoth etical protei n [Arabi dopsis thalia

164346	ATU026 286	ATL8C4 8900:1 075..7 66	nap											g22450 90	98	90	1.1e- 05	(Z9734 3) hypoth etical protei n [Arabi dopsis thalia na]	ea batata s]
164347	ATU026 287	ATL8C3 4426:3 64..63 4	nap											g40391 52	98	120	6.9e- 05	(AF104 221) low temper ature and salt respon sive protei n LTI6B [Arabi dopsis thalia na]	
164348	ATU026 288	ATL8S2 7539:3 03..46 3	nap											g14217 51	98	154	2.0e- 05	(U6059 2) putati ve ORF; conser ved in 5' leader s of plant	

164349	ATU026 289	ATL8C1 8892:7 18..1	nap							g40380 66	98	698	1.7e- 43	SAMdC [Pisum sativu m] (AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
164350	ATU026 290	ATL8C3 8706:6 54..77 5	nap							g48504 07	98	98	0.0002 4	(AC007 357) EST gb T21 221 comes from this gene. [Arabi dopsis thalia na]
164351	ATU026 291	ATL8C1 7711:3 8..193	nap							g54876 8	98	119	8.1e- 05	50S RIBOSO MAL PROTEI N L33 [Therm us aquati cus thermo philus]
164352	ATU026	ATL8C2	nap						ATL8C2	1.00	97	429	2.2e-	(AL050

292	5367:1 660..2 57							5367:8 96..25 7	81				44	261) hypoth etical protei n [Homo sapien s]
164353	ATU026 293	ATL8C2 008:37 2..494	nap						g48504 07	98	115	9.7e- 05	(AC007 357) EST gb T21 221 comes from this gene. [Arabi dopsis thalia na]	
164354	ATU026 294	ATL8C1 4170:2 28..40 3	nap						g42637 80	98	167	0.56	(AC006 068) unknow n protei n [Arabi dopsis thalia na]	
164355	ATU026 295	ATL8C1 1981:1 ..382	nap						g13372 0	98	370	3.6e- 25	30S RIBOSO MAL PROTEI N S11 [Esche richia coli]	
164356	ATU026	ATL8C4	nap						g47411	98	332	9.0e-	(AL049	

164363	ATU026 303	ATL8C3 8891:3 22..19 4	nap						g13621 07	98	110	1.9e- 07	GUT8- 2a protei n - common tobacco []
164364	ATU026 304	ATL8C4 7497:1 322..1 444	nap						g48504 07	98	163	1.3e- 10	(AC007 357) EST gb T21 221 comes from this gene. [Arabi dopsis thalia na]
164365	ATU026 305	ATL8S2 5981:6 10..47 3	nap						g10089 0	98	171	2.1e- 12	hypoth etical protei n - maize []
164366	ATU026 306	ATL8S2 6740:5 6..184	nap						g10089 0	98	134		hypoth etical protei n - maize []
164367	ATU026 307	ATL8C4 18:111 9..361	nap						g90578	98	99	0.87	H-2 class I histoc ompat ibility antige n T15

164368	ATU026 308	ATL8S2 3883:1 41..26 7	nap									g90654	98	176	7.9e- 15	hypoth etical protei n (B2 elemen t) - mouse []
164369	ATU026 309	ATL8C6 48:608 1..590 6	nap									g13507 46	98	65	0.50	60S RIBOSO MAL PROTEI N L40 (CEP52) []
164370	ATU026 310	ATL8C2 7834:5 49..92 1	nap								ATL8C2 7834:5 52..60 9	g32878 61	97	138		PUTATI VE TRYPSI N INHIBI TOR T01024 .26 PRECUR SOR [Arabi dopsis thalia na]
164371	ATU026 311	ATL8S8 043:54 8..137	nap								ATL8S8 043:54 7..483	g35818 41	97	124	5.2e- 09	(AL031 541) hypoth etical protei n

164372	ATU026 312	ATL8C3 1987:2 808..1 541	nap							ATL8C3 1987:2 763..1 541	0.91	g41604 41	97	438	3.5e- 45	SCI35. 08c [strep tomyce s coelic olor] (AF098 674) latera l suppre ssor protei n [Lycop ersico n escule ntum]
164373	ATU026 313	ATL8C2 1279:4 ..2128	nap							ATL8C2 1279:1 08..21 18	0.90	g30471 11	97	1305	6.2e- 135	(AF058 919) No defini tion line found [Arabi dopsis thalia na]
164374	ATU026 314	ATL8C8 063:1. .635	nap							ATL8C8 063:94 ..635	0.88	g40989 68	97	613	1.1e- 54	(U8129 4) germin -like protei n [Arabi dopsis thalia

164375	ATU026 315	ATL8C3 7625:6 83..1	nap				ATL8C3 7625:6 38..24 3	0.84	g36418 70	97	195	2.5e- 19	na] (AJ011 013) hypoth etical protei n [Cicer arieti num]
164376	ATU026 316	ATL8C2 3810:2 327..1 63	nap				ATL8C2 3810:2 327..1 80	0.84	g45572 73	97	531	6.6e- 53	aspart ylgluc osamin idase precu sor [Homo sapien s]
164377	ATU026 317	ATL8C3 5863:1 ..805	nap				ATL8C3 5863:1 52..80 5	0.83	g16539 54	97	94	7.1e- 08	(D9091 7) hypoth etical protei n [Synec hocyst is sp.]
164378	ATU026 318	ATL8S2 3590:4 91..16 4	nap				ATL8S2 3590:4 20..24 7	0.82	g10723 97	97	271	4.1e- 20	(X9335 8) phaC [Sinor hizobi um melilo ti]
164379	ATU026 319	ATL8C4 4174:4 097..1	nap				ATL8C4 4174:4 097..1	0.80	g46461 96	97	3398	0.0	(AC007 230) Contai

									0							ns similarity to F13P17 .8 []
164380	ATU026 320	ATL8C5 293:53 7..113 2	nap						ATL8C5 293:53 7..113 2	0.80	g38602 76	97	162	2.6e- 11	(AC005 824) unknown protein [Arabi dopsis thalia na]	
164381	ATU026 321	ATL8C4 5824:2 276..1 29	nap						ATL8C4 5824:2 079..1 29	0.79	g44552 50	97	1172	6.6e- 103	(AL035 523) putative protein [Arabi dopsis thalia na]	
164382	ATU026 322	ATL8C3 3880:6 813..4 445	nap						ATL8C3 3880:6 379..4 641	0.75	g47739 20	97	2363	(AF147 259) F10A2. 17 gene product [Arabi dopsis thalia na]		
164383	ATU026 323	ATL8C2 0620:3 ..2410	nap						ATL8C2 0620:3 ..2383	0.72	g17097 93	97	84	0.992	SALIV ARY PROLIN	

164384	ATU026 324	ATL8C5 0164:5 757..4 38	nap						ATL8C5 0164:5 739..4 38	0.71	g38057 69, g28326 47	97, 62	1955, 307	1.3e- 198, 4.3e- 19	E-RICH PROTEI N PO (ALLEL E M) (CONTA INS: PEPTID E P-D) [Homo sapien s]
164385	ATU026 325	ATL8C4 3634:1 ..1231	nap						ATL8C4 3634:6 28..12 31	0.69	g43888 26	97	707		(AC006 528) hypoth etical protei n [Arabi dopsis thalia na]

164386	ATU026 326	ATL8C2 4644:1 391..2 927	nap							0.66		ATL8C2 4644:1 391..2 927		g13635 28	97	1667	4.4e- 144	gag protei n - maize [Zea mays]	[Arabi dopsis thalia na]
164387	ATU026 327	ATL8C4 2325:1 990..1	nap							0.63		ATL8C4 2325:1 990..5 8		g45859 30	97	766	7.2e- 77	(AC007 211) hypoth etical protei n [Arabi dopsis thalia na]	
164388	ATU026 328	ATL8C3 3441:2 408..1	nap							0.63		ATL8C3 3441:2 151..6 5		g38057 69	97	2482	1.9e- 259	(AC005 693) putati ve mudR- like. transp oson [Arabi dopsis thalia na]	
164389	ATU026 329	ATL8C3 2553:5 080..5 97	nap							0.62		ATL8C3 2553:4 972..5 97		g38753 00, g28299 10	97, 67	283, 2312	3.6e- 21, 3.5e- 224	(Z6816 0) Simila rity to Yeast putati ve	

[illegible]

164390	ATU026 330	ATL8C2 2371:1 ..1684	nap								ATL8C2 2371:5 7..168 4	0.60					g38853 30	97	1734	2.1e- 164	(AC005 623) putati ve cytoch rome p450 protei n [Arabi dopsis thalia na]	291) Unknow n protei n, contai ns regula tor of chromo some con den sation motifs [Arabi dopsis thalia na]
164391	ATU026 331	ATL8C1 302:61 48..19 01	nap								ATL8C1 302:61 01..19 01	0.59					g28654 24	97	4737	0.0	(AF039 371) polypr oteins [Arabi dopsis thalia na]	
164392	ATU026	ATL8S3	nap								ATL8S3	0.57					g34521	97	176	3.6e-	(AJ004	

	332	088:39 ..357					088:93 ..332		40			15	901) resist ance protei n [Glyci ne max]
164393	ATU026 333	ATL8C1 6959:1 11..52 68	nap				ATL8C1 6959:1 11..52 60	0.57	g43887 19	97	2106	1.2e- 190	(AC006 413) putati ve myosin -like protei n [Arabi dopsis thalia na]
164394	ATU026 334	ATL8C2 9649:1 ..2764	nap				ATL8C2 9649:2 24..27 64	0.56	g43253 51	97	3456	0.0	(AF128 394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei n (GB:X5 7297) [Arabi dopsis thalia na]

164395	ATU026 335	ATL8S2 8535:1 ..443	nap				ATL8S2 8535:6 0..443	0.56	g12549 98	97	222	3.7e- 11	(U2958 7) homolo gous to moaE gene of E. coli; Method : concep tual transl ation suppli ed by author [Rhodo bacter sphaer oides]
164396	ATU026 336	ATL8C2 5678:3 84..58 3	nap				ATL8C2 5678:3 84..58 3	0.54	g25296 60	97	135	0.0065	(AC002 535) hypoth etical protei n [Arabi dopsis thalia na]
164397	ATU026 337	ATL8C7 82:127 1..255 5	nap				ATL8C7 82:127 1..243 7	0.50	g13635 28	97	1598	3.5e- 149	gag protei n - maize [Zea mays]
164398	ATU026 338	ATL8C3 7973:1	nap				ATL8C3 7973:1	0.47	g46783 73	97	239	3.2e- 15	(AL049 656)

164399	ATU026 339	ATL8C8 887:26 89..91 2	nap					54..98 0	0.43	g44552 03	97	898	9.8e- 92	putati ve protei n [Arabi dopsis thalia na]
164400	ATU026 340	ATL8C6 930:25 5..741	nap					ATL8C6 930:67 8..316	0.41	g30333 83	97	174	0.0025	(AC004 238) unknow n protei n [Arabi dopsis thalia na]
164401	ATU026 341	ATL8C1 8604:5 51..1	nap							g28275 47	97	364	2.6e- 33	(AL021 635) predic ted protei n [Arabi dopsis thalia na]
164402	ATU026 342	ATL8C1 4759:2	nap							g11724 40	97	138	2.8e- 07	CYTOCH ROME

																				B6-F COMPLE X 3.5 KD SUBUNI T (CYTOC HROME B6-F COMPLE X SUBUNI T 6) [Beta vulgar is]
164403	ATU026 343	ATL8C1 234:37 58..42 43	nap										g44328 09	97	768	2.3e- 58	(AC006 570) putati ve Athila retroo lement ORF1 protei n [Arabi dopsis thalia na]			
164404	ATU026 344	ATL8C2 421:21 ..125	nap										g38602 76	97	109	4.6e- 06	(AC005 824) unknow n protei n [Arabi dopsis thalia na]			

164405	ATU026 345	ATL8C2 1528:4 15..50 1	nap							g48836 10	97	106	0.16	(AC006 922) unknown protein [Arabi dopsis thalia na]
164406	ATU026 346	ATL8C1 6684:2 214..2 318	nap							g38602 76	97	134	7.1e- 07	(AC005 824) unknown protein [Arabi dopsis thalia na]
164407	ATU026 347	ATL8C6 02:159 0..461	nap							g35823 21	97	599	1.2e- 64	(AC005 496) hypoth etical protein [Arabi dopsis thalia na]
164408	ATU026 348	ATL8C1 3980:4 825..8 91	nap							g43357 20	97	3439	0.0	(AC006 248) putati ve revers e transc riptas e Tal- 1

164413	ATU026 353	ATL8C2 8620:1 ..582	nap								g97616 9	97	741	1.3e- 72	muscul us] (L4718 5) revers e transc riptas e [Arabi dopsis thalia na]
164414	ATU026 354	ATL8C2 2335:4 925..2 923	nap								g43887 22	97	2008	1.1e- 171	(AC006 413) putati ve centro meric protei n [Arabi dopsis thalia na]
164415	ATU026 355	ATL8C8 376:39 14..1	nap								g29613 74	97	2141	4.4e- 136	(AL022 141) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]
164416	ATU026	ATL8S1	nap								g10857	97	113	6.6e-	cut C

164417	356	7530:1 ..476										29				06	protein - Pseudomonas thermo carboxy dovorans [Pseudomonas thermo carboxy dovorans]
	ATU026 357	ATL8S1 3674:4 76..26 2	nap									g40380 38	97	215	7.0e- 10	(AC005936) putative proteinase inhibitor II [Arabi dopsis thalia na]	
164418	ATU026 358	ATL8C3 1606:2 5..865	nap									g42622 45	97	104	5.4e- 05	(AC006200) hypothetical protein n [Arabi dopsis thalia na]	
164419	ATU026 359	ATL8C2 4830:9 47..1	nap									g45444 60	97	1097	2.6e- 97	(AC006592) putative ve.	

164420	ATU026 360	ATL8S1 9786:2 79..39 2	nap										g13136 5	97	101	8.8e- 05	reverse transcriptase [Arabidopsis thaliana nap]
164421	ATU026 361	ATL8S5 415:53 8..1	nap										g13349 7	96	499	6.1e- 48	RIBOSOME RECYCLING FACTOR (RIBOSOME RELEASE ING FACTOR) (RRF) [Escherichia coli]

164422	ATU026 362	ATL8C4 4373:8 28..30 71	nap				ATL8C4 4373:8 28..30 07	0.90	g45859 37	96	1787	1.5e- 157	(AC007 211) putati ve repl ic ation protei n Al [Arabi dopsis thalia na]
164423	ATU026 363	ATL8C4 8914:4 547..2 196	nap				ATL8C4 8914:4 492..2 260	0.90	g49143 68	96	1838	1.1e- 159	(AC007 584) hypoth etical protei n simila r to T18A10 .3 [Arabi dopsis thalia na]
164424	ATU026 364	ATL8C4 5789:5 00..1	nap				ATL8C4 5789:5 00..37	0.86	g17299 38	96	238	2.8e- 23	THIORE DOXIN- LIKE PROTEI N SLR023 3 [Synec hocyst is sp.]
164425	ATU026 365	ATL8C3 390:33 26..1	nap				ATL8C3 390:33 26..20	0.85	g29795 50	96	1304	1.4e- 132	(AC003 680) putati

164426	ATU026 366	ATL8C4 74:727 ..2212	nap					ATL8C4 74:727 ..2159	0.77	g49143 79	96	227	1.2e- 16	(AC007 584) hypoth etical protei n [Arabi dopsis thalia na]
164427	ATU026 367	ATL8C1 6006:8 70..10 90	nap					ATL8C1 6006:1 090..8 70	0.75	g13520 54	96	106	0.0011	ATP SYNTA SE 6 KD SUBUNI T, MITOCH ONDRIA L []
164428	ATU026 368	ATL8C9 429:17 1..332	nap					ATL8C9 429:17 1..332	0.73	g45672 97	96	109	0.0002 4	(AC006 918) putati ve 5S riboso mal RNA [Arabi dopsis thalia na]

164429	ATU026 369	ATL8C4 5090:1 ..2535	nap				ATL8C4 5090:4 9..253 5	0.73	g47739 20	96	2533	2.1e- 245	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]
164430	ATU026 370	ATL8C2 4442:1 635..1	nap				ATL8C2 4442:1 504..1 40	0.73	g60085 5	96	417	8.8e- 39	(U1788 7) bZIP protei n [Arabi dopsis thalia na]
164431	ATU026 371	ATL8C3 7196:6 947..5 051	nap				ATL8C3 7196:6 836..5 051	0.69	g44544 64	96	804		(AC006 234) unknow n protei n [Arabi dopsis thalia na]
164432	ATU026 372	ATL8C2 4511:1 ..1361	nap				ATL8C2 4511:4 8..136 1	0.68	g21296 77	96	1029	4.1e- 108	probab lel N- acetyl transf erase hookle ss 1 - Arabid opsis thalia

164433	ATU026 373	ATL8C4 5732:1 57..88 2	nap					ATL8C4 5732:4 27..76 4	0.62	g40380 66	96	667	4.1e- 50	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
164434	ATU026 374	ATL8C4 024:45 10..38 91	nap					ATL8C4 024:42 67..38 91	0.59	g47340 12	96	318	7.7e- 16	(AC007 112) hypoth etical protei n [Arabi dopsis thalia na]
164435	ATU026 375	ATL8C2 6180:9 4..149 4	nap					ATL8C2 6180:1 74..12 87	0.58	g44551 83	96	995	2.5e- 106	(AL035 521) putati ve protei n [Arabi dopsis thalia na]
164436	ATU026 376	ATL8C4 2140:1 547..5 58	nap					ATL8C4 2140:1 475..5 58	0.58	g16680 5	96	121	4.8e- 13	(M5919 6) pathog enesis _

164437	ATU026 377	ATL8C1 9305:1 42..32 77	nap						ATL8C1 9305:1 42..31 06	0.57			g47739 20	96	3066	1.1e- 290	related protein [Arabidopsis thaliana]
164438	ATU026 378	ATL8C9 476:97 3..337 9	nap						ATL8C9 476:97 3..320 4	0.55			g45389 84	96	3278	4.4e- 274	(AF147 259) F10A2. 17 gene product [Arabidopsis thaliana]
164439	ATU026 379	ATL8S7 982:15 6..570	nap						ATL8S7 982:15 6..512	0.53			g53236 0	96	204	5.7e- 17	(AL049 487) putative protein [Arabidopsis thaliana]
164440	ATU026 380	ATL8C2 5599:4 48..17 87	nap						ATL8C2 5599:6 41..17 02	0.44			g41851 31	96	1151	2.4e- 79	(L1458 0) ORFD1 [Bacillus subtilis]
																	(AC005 724) putative

164441	ATU026 381	ATL8C3 5849:6 51..1	nap									g47339 74	96	780	2.7e- 75	(AC007 264) hypoth etical protein [Arabi dopsis thalia na]
164442	ATU026 382	ATL8S3 0803:1 96..1	nap									g12627 22	96	136	0.10	(D1751 0) ORF67C [Pinus thunbe rgii]
164443	ATU026 383	ATL8C1 7195:3 315..3 395	nap									g45672 97	96	104	0.0014	(AC006 918) putati ve 5S riboso mal RNA [Arabi dopsis thalia na]
164444	ATU026 384	ATL8C7 910:31 33..20 76	nap									g48357 95	96	697	2.1e- 81	(AC007 296) F25C20 .23 [Arabi

164445	ATU026 385	ATL8C1 356:15 61..51 76	nap										g48877 45, g44540 39	96, 86	555, 543	4.3e- 65, 2.8e- 53	dopsis thalia nal (AC006 533) putati ve Na+/H+ exchan ging protei n [Arabi dopsis thalia nal; (AL035 394) putati ve Na+/H+ - exchan ging protei n [Arabi dopsis thalia nal]
164446	ATU026 386	ATL8S2 8304:2 47..1	nap										g34350 3	96	139	0.0056	(L1225 0) riboso mal protei n S12 [Nicot iana tabacu m]

164447	ATU026 387	ATL8C1 2131:2 791..5 56	nap							g45444 12, g36950 23	96, 74	296, 171	2.7e- 36, 1.9e- 19	(AC006 955) hypoth etical protei n [Arabi dopsis thalia nal]; (AF055 850) unknow n [Arabi dopsis thalia nal]
164448	ATU026 388	ATL8C5 797:16 2..82	nap							g45672 97	96	101		(AC006 918) putati ve 5S riboso mal RNA [Arabi dopsis thalia nal]
164449	ATU026 389	ATL8C1 3973:1 574..6 404	nap							g45672 97, g45389 66, g42621 75, g33675 26	96, 74, 48, 35	109, 2555, 179, 388	0.0006 4, 1.1e- 267, 9.8e- 17, 4.0e- 41	(AC006 918) putati ve 5S riboso mal RNA [Arabi dopsis thalia nal];

164457	ATU026 397	ATL8C2 0274:5 95..51 5	nap							g45672 97	96	107	0.0001 0	gag- protea se polypr oteins [Arabi dopsis thalia na]
164458	ATU026 398	ATL8C4 0412:1 18..49 5	nap							g30972 60	96	89	3.7e- 07	(AJ005 741) self- incomp atibil ity [Papav er rheas]
164459	ATU026 399	ATL8C2 2233:6 75..25 1	nap							g14028 1	96	211	8.9e- 10	HYPOTH ETICAL 16.8 KD PROTEI N (ORF 143) [Glyci ne max]

164460	ATU026 400	ATL8C1 3491:4 526..4 606	nap							g45672 97	96	119	4.1e- 05	(AC006 918) putati ve 5S riboso mal RNA [Arabi dopsis thalia na]
164461	ATU026 401	ATL8C4 0347:7 ..1308	nap							g42063 09	96	1800	6.5e- 181	(AF049 112) prpol [Zea mays]
164462	ATU026 402	ATL8S2 9784:1 ..134	nap							g10089 0	96	140	4.0e- 09	hypoth etical protei n - maize []
164463	ATU026 403	ATL8C3 3657:1 912..2 83	nap						ATL8C3 3657:1 912..3 00	g48951 87	95	74	0.0002 5	(AC007 661) unknow n protei n [Arabi dopsis thalia na]
164464	ATU026 404	ATL8C1 8004:7 792..1	nap						ATL8C1 8004:1 212..2 94, ATL8C1 8004:7 391..1 600	g45570 68, g33778 16, g41153 62	95, 78, 38	3101, 728, 837	0.0, 1.9e- 74, 9.6e- 85	(AC007 045) putati ve pol polypr oteins [Arabi dopsis

[illegible]

164466	ATU026 406	ATL8S1 7388:5 65..57	nap						0.94		g21043 38	95	712	8.1e- 54	(Z9538 8) hypoth etical protei n Rv2140 C [Mycob acteri um tuberc ulosis]
164467	ATU026 407	ATL8S5 048:1. .361	nap						0.94		g38609 51	95	147	3.8e- 13	(AJ235 271) unknow n [Ricke ttsia prowaz ekii]
164468	ATU026 408	ATL8C3 3253:2 939..4 694	nap						0.92		g40068 82	95	1438	1.9e- 148	(Z9970 7) UDP- glucur onyltr anser ase- like protei n [Arabi dopsis thalia na]
164469	ATU026	ATL8S2	nap						0.91		g32942	95	171	4.8e-	(AL031

	409	0729:5 00..17				0729:4 82..17		46				12	031) putative transcriptio nal regula tor [Strep tomyces coelicolor]
164470	ATU026 410	ATL8S2 0742:1 0..521	nap			ATL8S2 0742:1 0..485	0.91	g18700 03	95	411	8.9e- 35		(Z9253 9) hypothetical protein Rv1025 [Mycobacteri um tuberculosis]
164471	ATU026 411	ATL8C1 0337:5 643..4 486	nap			ATL8C1 0337:5 561..4 486	0.88	g47339 82	95	1489			(AC007 268) hypothetical protein [Arabis dopsis thaliana]
164472	ATU026 412	ATL8C4 5245:4 68..96 0	nap			ATL8C4 5245:5 78..77 0	0.84	g30565 85	95	427	3.0e- 22		(AC004 255) TIF9.6 [Arabis]

164473	ATU026 413	ATL8C3 4712:1 883..5 31	nap				ATL8C3 4712:1 774..5 31	0.84	g47590 78	95	271	6.3e- 25	serolo gicall y define d colon cancer antige n 1 [Homo sapien s]
164474	ATU026 414	ATL8C3 1184:1 717..1	nap				ATL8C3 1184:1 717..2 83	0.84	g36458 98	95	2441	1.3e- 210	(U6840 8) in- frame stop codon; possib ly a post- transp ositio n mutati on [Zea mays]
164475	ATU026 415	ATL8C3 6284:1 61..39 11	nap				ATL8C3 6284:1 70..30 11	0.84	g43371 96	95	1625	1.4e- 172	(AC006 403) putati ve serine /threo nine recept or kinase

164476	ATU026 416	ATL8C3 1280:9 57..55	nap				ATL8C3 1280:8 01..82	0.82	g45389 71	95	232	2.3e- 25	[Arabi dopsis thalia na] (AL049 488) putati ve protei n [Arabi dopsis thalia na]
164477	ATU026 417	ATL8C4 6405:1 420..1	nap				ATL8C4 6405:1 420..4 6	0.82	g17033 18	95	687	2.5e- 65	ANNEXI N-LIKE PROTEI N RJ4 [Fraga ria x ananas sa]
164478	ATU026 418	ATL8C4 4211:4 250..1 371	nap				ATL8C4 4211:3 938..1 371	0.81	g45394 14	95	2834	6.9e- 287	(AL049 524) putati ve subtil isin- like protea se [Arabi dopsis thalia na]
164479	ATU026 419	ATL8S1 1102:1 17..54 4	nap				ATL8S1 1102:1 17..49 4	0.79	g45855 95	95	262	1.0e- 18	(AL049 628) putati ve acetyl

164480	ATU026 420	ATL8C1 5494:3 643..1	nap					ATL8C1 5494:3 643..2 34	0.77	g38501 11	95	485	1.1e- 41	transf erase [Strep tomyce s coelic olor] (AL033 388) hypoth etical integr al membra ne protei n, putati ve involv ement in lipid metabo lism [Schiz osacch aromyc es pombel]
164481	ATU026 421	ATL8C3 5376:3 06..96 2	nap					ATL8C3 5376:3 06..93 5	0.77	g18711 88	95	296	2.4e- 35	(U9043 9) Zinc finger protei n 8, ZFP8 [Arabi dopsis thalia

164482	ATU026 422	ATL8C2 3484:1 690..1 2	nap				ATL8C2 3484:1 645..6 04	0.61	g38057 62, g45389 09	95, 88	81, 821	3.3e- 08, 3.9e- 84	na] (AC005 693) hypoeth etical protein [Arabi dopsis thalia na]; (AL049 482) putative protein [Arabi dopsis thalia na]
164483	ATU026 423	ATL8C1 6731:1 006..1	nap				ATL8C1 6731:8 02..24 7	0.58	g47339 70	95	164	8.3e- 20	(AC007 264) hypoeth etical protein [Arabi dopsis thalia na]
164484	ATU026 424	ATL8C3 9185:3 733..5 1	nap				ATL8C3 9185:3 688..5 1	0.57	g40380 62	95	3894	0.0	(AC005 897) putative transp oson MuDR [Arabi dopsis

164485	ATU026 425	ATL8C3 92:246 8..207 1	nap				ATL8C3 92:231 5..207 1	0.55	g32876 89	95	308	3.7e- 17	thalia nal (AC003 979) Contai ns simila rity to gibber ellin- regula ted protei n 2 precur sor (GAST1) homolo g gb U11 765 from A. thalia na. [Arabi dopsis thalia nal (AF007 569) succin ate dehydr ogenas e membra ne
164486	ATU026 426	ATL8S6 061:37 7..1	nap				ATL8S6 061:33 5..18	0.54	g31697 22	95	309	2.3e- 22	

164487	ATU026 427	ATL8C1 0819:1 ..2883	nap						ATL8C1 0819:1 09..28 83	0.53	g30212 83	95	3579	2.7e- 309	anchor subunit [Brady rhizob ium japoni cum] (AL022 347) serine /threo nine kinase - like protei n [Arabi dopsis thalia na]
164488	ATU026 428	ATL8C2 5206:2 80..12 87	nap						ATL8C2 5206:2 86..12 26	0.49	g32128 60	95	450	1.7e- 58	(AC004 005) hypoth etical protei n [Arabi dopsis thalia na]
164489	ATU026 429	ATL8C4 3327:1 ..2311	nap						ATL8C4 3327:2 41..39 8	0.48	g47739 20	95	2476		(AF147 259) F10A2. 17 gene produc t [Arabi dopsis na]

164490	ATU026 430	ATL8C1 622:12 58..29 65	nap					ATL8C1 622:12 58..29 52	0.43		g27696 42	95	2058	2.5e- 202	thalia na] (Z9721 5) nine- cis- epoxyc aroten oid dioxyc enase [Lycop ersico n escule ntum]
164491	ATU026 431.	ATL8C2 894:90 6..9	nap					ATL8C2 894:37 7..44	0.41		g40975 28	95	230	5.4e- 22	(U6389 8) AppB protei n [Arabi dopsis thalia na]
164492	ATU026 432	ATL8C1 4425:4 803..7 134	nap								g42630 63	95	1647	3.6e- 142	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
164493	ATU026 433	ATL8C4 6597:2 617..4 732	nap								g45860 66	95	3080	6.9e- 309	(AC006 194) putati ve pol ypr

164494	ATU026 434	ATL8C4 2987:1 ..1222	nap									g42062 07	95	1010	3.8e- 105	(AF071 527) putati ve revers e transc riptas e [Arabi dopsis thalia na]
164495	ATU026 435	ATL8C2 0679:1 077..1 999	nap									g43888 23	95	761	1.1e- 71	(AC006 528) hypoth etical protei n [Arabi dopsis thalia na]
164496	ATU026 436	ATL8C2 0675:5 809..3 214	nap									g43888 25	95	2026	4.6e- 208	(AC006 528) putati ve pol ypr otein with revers e

164497	ATU026 437	ATL8C1 0757:1 ..593	nap							95	924	6.3e- 92	(AC006 259) putati ve P450 [Arabi dopsis thalia na]
164498	ATU026 438	ATL8C4 5265:8 78..17 34	nap							95	290	3.6e- 29	(AC007 261) envelo pe- like protie n [Arabi dopsis thalia na]
164499	ATU026 439	ATL8C4 6811:1 ..1906	nap							95	1254	4.5e- 134	(AC004 684) recept or- like protei n kinase [Arabi

164500	ATU026 440	ATL8C4 8943:9 35..32 1	nap					ATL8C4 8943:8 50..32 1	0.98	g13620 93	94	569	6.1e- 57	dopsis thalia na]
164501	ATU026 441	ATL8C3 2721:6 662..5 705	nap					ATL8C3 2721:6 479..5 705	0.97	g30803 60	94	595	1.0e- 57	(AL022 580) hypoth tetica l protei n [Arabi dopsis thalia na]
164502	ATU026 442	ATL8S2 9482:1 ..525	nap					ATL8S2 9482:5 3..525	0.96	g13457 49	94	339	3.3e- 30	10 KD CHAPER ONIN (PROTE IN CPN10) (PROTE IN GROES) [Pseud omonas

164503	ATU026 443	ATL8C8 045:15 45..1	nap					ATL8C8 045:15 32..31 2	0.96	g49143 58	94	479	2.5e- 44	(AC007 289) hypoth etical protei n [Arabi dopsis thalia na]
164504	ATU026 444	ATL8C5 802:18 92..14 6	nap					ATL8C5 802:16 41..14 6	0.95	g32016 28	94	2260		(AC004 669) unknow n protei n [Arabi dopsis thalia na]
164505	ATU026 445	ATL8C4 4371:1 ..989	nap					ATL8C4 4371:1 1..961	0.93	g44163 03	94	1296	1.2e- 100	(AF105 716) gag protei n [Zea mays]
164506	ATU026 446	ATL8C3 7809:4 606..1 44	nap					ATL8C3 7809:4 363..1 81	0.86	g17636 42	94	430	1.7e- 31	(U8003 4) mitoch ondria l interm ediate peptid ase precu sor

164507	ATU026 447	ATL8C5 908:19 93..1	nap						ATL8C5 908:19 57..21 2	0.85	g29110 42	94	1953	[Homo sapien s] (AL021 961) Phosph oglyce rate dehydr ogenas e - like protei n [Arabi dopsis thalia na]
164508	ATU026 448	ATL8C4 9051:1 802..5 48	nap						ATL8C4 9051:1 730..5 64	0.85	g45390 02	94	739	(AL049 481) putati ve protei n [Arabi dopsis thalia na]
164509	ATU026 449	ATL8C7 970:35 54..1	nap						ATL8C7 970:19 70..25 , ATL8C7 970:35 54..20 94	0.82, 0.68	g44173 09	94	3341	(AC006 446) putati ve pol polypr otein with a revers e transc riptas e

164510	ATU026 450	ATL8C4 9130:1 ..1461	nap						ATL8C4 9130:4 6..146 1	0.79		g44553 09	94	754	8.4e- 63	domain [Arabi dopsis thalia na]
164511	ATU026 451	ATL8C4 1946:8 089..3 697	nap						ATL8C4 1946:8 089..3 697	0.78		g43253 51	94	3628	0.0	(AF128 394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei n (GB:X5 7297) [Arabi dopsis thalia na]
164512	ATU026 452	ATL8C3 3803:9 49..45 39	nap						ATL8C3 3803:9 49..45 03	0.77		g37575 16	94	2470	1.4e- 264	(AC005 167) putati ve TMV resist

164513	ATU026 453	ATL8C4 8509:9 93..1	nap					ATL8C4 8509:9 93..51 7	0.76	g35102 54	94	1056	7.2e- 98	ance protei n [Arabi dopsis thalia na]
164514	ATU026 454	ATL8C5 0123:2 833..6 87	nap					ATL8C5 0123:2 747..6 87	0.75	g47339 65, g47739 08	94, 59	143, 1260	1.3e- 05, 3.0e- 97	(AC007 261) hypo thetical protei n [Arabi dopsis thalia na]; (AF147 259) No defini tion line found [Arabi dopsis thalia na]
164515	ATU026	ATL8C2	nap					ATL8C2	0.75	g33778	94	342	1.1e-	(AF076

164516	ATU026 456	ATL8S3 0570:1 90..1	nap						9629:8 22..72 0	46			18	274) No defini tion line found [Arabi dopsis thalia na]
								ATL8S3 0570:1 81..34	0.74	g38611 52	94	132	2.2e- 09	(AJ235 272) 50S RIBOSO MAL PROTEI N L35 (rpmI) [Ricke ttsia prowaz ekil]
164517	ATU026 457	ATL8C3 6014:1 ..544	nap					ATL8C3 6014:2 8..544	0.73	g17996 39	94	325	4.2e- 30	(D9085 9) NADH DEHYDR OGENAS E I CHAIN K (EC 1.6.5. 3) (NADH- UBIQUI NONE OXIDOR EDUCTA SE CHAIN 11)

164520	ATU026 460	ATL8C2 7:2396 .15	nap						ATL8C2 7:690. .75	0.69	g45843 55	94	2132	1.7e- 199	n [Arabi dopsis thalia na]
															(AC006 420) putati ve Ac- like transp osase [Arabi dopsis thalia na]
164521	ATU026 461	ATL8C4 1459:1 706..1	nap						ATL8C4 1459:1 706..1 2	0.68	g36458 98	94	2477	4.9e- 210	(U6840 8) in- frame stop codon; possib ly a post- transp ositio n mutati on [Zea mays]
164522	ATU026 462	ATL8C1 482:1. .504	nap						ATL8C1 482:16 4..413	0.68	g47259 49	94	805	2.5e- 43	(AL049 730) PEARLI l-like protei n [Arabi dopsis thalia

164523	ATU026 463	ATL8C3 3737:6 3..121 8	nap				ATL8C3 3737:6 3..986	0.65	g12795 98	94	764	5.1e- 77	na] (Z7175 2) pectin methyl esterase [Nicot iana plumbag inifolia]
164524	ATU026 464	ATL8C9 221:95 94..56 12	nap				ATL8C9 221:94 07..56 12	0.62	g44173 09	94	3225		(AC006 446) putative polypro tein with a reverse transc riptase domain [Arabi dopsis thaliana]
164525	ATU026 465	ATL8C1 8047:1 ..1384	nap				ATL8C1 8047:9 19..13 84	0.62	g40564 33	94	992	2.8e- 93	(AC005 990) Similars to antennar specific proline- rich protein

164526	ATU026 466	ATL8C1 092:14 37..1	nap						ATL8C1 092:14 37..10 8	0.59	g40334 31	94	1624	1.0e- 169	(CEX) gb X60 376 from Brassi ca napus. [Arabi dopsis thalia nal]
164527	ATU026 467	ATL8C1 9923:2 094..1 005	nap						ATL8C1 9923:1 601..1 132	0.57	g46789 26	94	493	1.3e- 42	(AL049 711) hypoth etical protei n [Arabi dopsis thalia nal]
164528	ATU026 468	ATL8S1 8760:5 28..1	nap						ATL8S1 8760:4 86..68	0.55	g14868 3	94	576	3.4e- 54	(M5534 3) open readin g

164529	ATU026 469	ATL8C2 382:20 10..30 79	nap							ATL8C2 382:20 79..29 34	0.54	g44172 85	94	197	7.4e- 27	frame [Frank ia sp.] (AC007 019) hypoth etical protei n [Arabi dopsis thalia na]
164530	ATU026 470	ATL8C4 8446:1 ..302	nap							ATL8C4 8446:4 8..276	0.52	g32199 51	94	94	0.073	HYPOTH ETICAL 11.7 KD PROTEI N C6B12. 13 IN CHROMO SOME I [Schiz osacch aromyc es pombe]
164531	ATU026 471	ATL8C2 3991:1 965..1	nap							ATL8C2 3991:1 893..3 13	0.49	g35401 88	94	596	1.6e- 49	(AC004 122) Hypoth etical protei n [Arabi dopsis thalia na]
164532	ATU026	ATL8C4	nap							ATL8C4	0.49	g40068	94	254	2.0e-	(Z9970

164533	472	5125:2 227..1					5125:2 152..4 33	76				35	7) hypothetical protein [Arabis dopsis thaliana]
	ATU026 473	ATL8C1 6620:3 567..8 38	nap				ATL8C1 6620:2 568..8 56	0.48	g21045 34	1460	94	6.6e- 156	(AF001308) hypothetical protein [Arabis dopsis thaliana]
164534	ATU026 474	ATL8S8 846:62 5..309	nap				ATL8S8 846:49 9..310	0.45	g34452 05	432	94	1.1e- 29	(AC004786) hypothetical protein [Arabis dopsis thaliana]
164535	ATU026 475	ATL8C2 4344:1 060..7 67	nap						g42204 78	310	94	6.0e- 27	(AC006069) hypothetical protein [Arabis dopsis thaliana]
164536	ATU026	ATL8C1	nap						g13635	1406	94	6.2e-	gag

	476	5670:1 051..1									28						121	protei n - maize [Zea mays]
164537	ATU026 477	ATL8C3 5136:9 30..14 46	nap								94	711					2.1e- 56	(AC006 841) putati ve dihydr ofolat e reduct ase, 3', partia l [Arabi dopsis thalia na]
164538	ATU026 478	ATL8C4 8124:3 72..79 5	nap								94	164					2.6e- 13	CALMOD ULIN []
164539	ATU026 479	ATL8C9 562:18 52..25 29	nap								94	497					4.7e- 47	(X8919 2) DNA bindin g protei n [Arabi dopsis thalia na]
164540	ATU026 480	ATL8C3 9264:2 424..1 495	nap								94	1047					5.6e- 98	(AB000 835) gerany l gerany

164541	ATU026 481	ATL8C1 974:37 1..1	nap							g24941 17	94	157	1.7e- 13	(AC002 376) Contai ns simila rity to Papave r S3 self- incomp atibil ity protei n (gbIX8 7100). [Arabi dopsis thalia na]
164542	ATU026 482	ATL8S1 9686:4 66..56	nap							g14028 1	94	153	0.0030	HYPOTH ETICAL 16.8 KD PROTEI N (ORF 143) [Glyci ne]

[illegible]

164543	ATU026 483	ATL8C1 6083:8 86..23 46	nap									g31278 38, g24928 20	94, 94	809, 708	3.7e- 75, 4.5e- 65	[max] (AL023 496) hypoth etical protei n [Strep tomyce s coelic olor]; HYPOTH ETICAL 54.0 KD PROTEI N IN NRGA- USD INTERG ENIC REGION [Bacil lus subtil is]
164544	ATU026 484	ATL8S1 169:62 8..168	nap									g32490 87	94	545	8.4e- 53	(AC004 473) Contai ns simila rity to TMV resist ance protei n N homolo g

164549	ATU026 489	ATL8C7 703:1. .1207	nap									g45104 15	94	602	1.2e- 47	[Sorghum bicolor] (AC006 929) putative chloroplast nucleoid DNA binding protein [Arabidopsis thaliana]
164550	ATU026 490	ATL8C4 9427:1 ..945	nap									g13455 92	94	526	1.9e- 47	14-3- 3-LIKE PROTEIN GF14 EPSILON [Arabidopsis thaliana]
164551	ATU026 491	ATL8C1 5192:1 ..905	nap									g22451 27	93	1252	2.8e- 68	(Z9734 4) hypothetical protein [Arabidopsis thaliana]

164552	ATU026 492	ATL8S5 251:12 4..581	nap				ATL8S5 251:19 3..566	0.92	g17229 51	93	628	4.7e- 59	HYPOTH ETICAL 18.2 KD PROTEI N CY373. 03 [Mycob acteri um tuberc ulosis]
164553	ATU026 493	ATL8C3 1626:3 295..1	nap				ATL8C3 1626:3 295..1 94	0.91	g21911 95	93	2663	3.8e- 231	(AF007 271) contai ns simila rity to T. cruzi 3' end fragne nt (PID:g 161956) [Arabi dopsis thalia na]
164554	ATU026 494	ATL8C1 836:35 9..656	nap				ATL8C1 836:35 9..608	0.90	g48952 01	93	461	0.013	(AC007 661) hypoth etical protei n [Arabi dopsis

164555	ATU026 495	ATL8C1 0834:1 ..5910	nap					ATL8C1 0834:1 14..57 75	0.88	g15146 43	93	4292	0.0	thalia nal (Z7052 4) PDR5- like ABC transp orter [Spiro dela polyrr hizal] (AC005 508) 12894 [Arabi dopsis thalia nal]; (AC007 231) putati ve Tall revers e transc riptas e [Arabi dopsis thalia nal]
164556	ATU026 496	ATL8C1 6770:9 66..1	nap					ATL8C1 6770:7 40..61 7	0.86	g42621 75, g48951 66	93, 64	805, 123	8.9e- 79, 6.6e- 08	(AC005 508) 12894 [Arabi dopsis thalia nal]; (AC007 231) putati ve Tall revers e transc riptas e [Arabi dopsis thalia nal]
164557	ATU026 497	ATL8S2 3751:1 ..507	nap					ATL8S2 3751:3 3..371	0.84	g13382 3, g11729 57	93, 68	189, 259	9.8e- 16, 3.0e- 21	30S RIBOSO MAL PROTEI N S17 [Esche

164561	ATU026 501	ATL8C2 2752:1 ..2145	nap					ATL8C2 2752:7 0..212 1	0.82		g28298 96	93	1637	3.0e- 172	dopsis thalia na]
															(AC002 311) highly similar to auxin- regula ted protei n GH3, gp X60 033 18 591 [Arabi dopsis thalia na]
164562	ATU026 502	ATL8C4 5794:2 156..7 2	nap					ATL8C4 5794:1 817..7 2	0.82		g47739 14	93	740	6.0e- 48	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
164563	ATU026 503	ATL8C1 7206:8 76..29 0	nap					ATL8C1 7206:8 21..29 0	0.81		g45899 58	93	307	8.0e- 29	(AC007 169) hypothe tical protei n [Arabi dopsis thalia na]

164564	ATU026 504	ATL8C1 1052:2 084..3 36	nap				ATL8C1 1052:1 926..5 00	0.81	g44552 50	93	550	3.6e- 41	na] (AL035 523) putați ve protei n [Arabi dopsis thalia na]
164565	ATU026 505	ATL8C2 3618:2 21..18 56	nap				ATL8C2 3618:3 70..17 36	0.77	g30753 99	93	595	5.7e- 34	(AC004 484) SF16- like protei n [Arabi dopsis thalia na]
164566	ATU026 506	ATL8C1 9177:4 713..7	nap				ATL8C1 9177:4 497..7	0.73	g22929 07	93	2756	9.2e- 282	(Y1009 9) P- glycop rotein homolo gue [Horde um vulgar e]
164567	ATU026 507	ATL8C7 745:15 62..28 04	nap				ATL8C7 745:15 62..23 89	0.70	g13635 28	93	1495	9.7e- 128	gag protei n - maize [Zea mays]
164568	ATU026 508	ATL8C2 0482:1 548..1	nap				ATL8C2 0482:1 536..4	0.69	g33353 73	93	621	7.5e- 51	(AC003 028) putati

164569	ATU026 509	ATL8C1 8107:9 96..1	nap					8	ATL8C1 8107:7 74..39	0.69	g39010 12	93	767	1.6e- 81	ve GTL1 protei n [Arabi dopsis thalia na]
164570	ATU026 510	ATL8C1 2182:1 ..922	nap						ATL8C1 2182:1 07..92 2	0.68	g13880 74	93	436	3.4e- 43	(AJ130 885) xylogl ucan endotr ansgly cosyla se 1 [Fagus sylvat ica]
164571	ATU026 511	ATL8C1 0208:1 915..3 83	nap						ATL8C1 0208:1 792..1 159	0.65	g45860 58	93	1653		(U3563 9) thiore doxin- like protei n [Arabi dopsis thalia na]
															(AC007 020) unknow n protei n [Arabi dopsis thalia na]

164572	ATU026 512	ATL8C3 0921:2 148..1	nap				ATL8C3 0921:2 018..5 12	0.61	943097 56, 940380 62	93, 51	919, 851	3.8e- 103, 2.8e- 97	(AC006 217) putati ve transp osase [Arabi dopsis thalia na]; (AC005 897) putati ve transp oson MuDR [Arabi dopsis thalia na]
164573	ATU026 513	ATL8C4 9880:1 ..1683	nap				ATL8C4 9880:1 8..138 1	0.59	947340 05	93	993	4.2e- 109	(AC007 178) hypoth etical protei n [Arabi dopsis thalia na]
164574	ATU026 514	ATL8C5 911:1. ..1166	nap				ATL8C5 911:81 ..1138	0.57	944902 96	93	825		(AL035 678) hypoth etical protei n [Arabi dopsis thalia

164575	ATU026 515	ATL8C2 9868:4 71..71	nap				ATL8C2 9868:4 26..71	0.52		g24926 54	93	105	1.8e- 07	na] ACYL CARRIE R PROTEI N (ACP) []
164576	ATU026 516	ATL8C4 1359:3 430..5 77	nap				ATL8C4 1359:3 364..1 832	0.52		g44328 02	93	2908	9.8e- 297	(AC006 437) putati ve pol ypr otein, 5, partia l [Arabi dopsis thalia na]
164577	ATU026 517	ATL8C3 6048:1 112..1 83	nap							g28326 43	93	334	1.5e- 45	(AI021 710) hypoth etical protei n [Arabi dopsis thalia na]
164578	ATU026 518	ATL8C1 2432:1 040..1 715	nap							g34027 50	93	311	1.2e- 28	(AL031 187) putati ve protei n [Arabi dopsis thalia na]

164583	ATU026 523	ATL8C2 0708:5 16..22 85	nap								66					103	tobacco (fragment) [Nicotiana tabacum]; (AC006446) putative polypeptide with a reverse transcriptase domain [Arabidopsis thaliana]; (AF098806) polypeptide [Sorghum bicolor]
											gl418331	93	1164	2.9e-124	(X95909) receptor like protein		

164584	ATU026 524	ATL8C3 4524:2 637..3 216	nap									g31933 15	93	141	6.7e- 12	kinase [Arabi dopsis thalia nal] (AF069 299) contai ns simila rity to transc riptio nal activa tor Ra [Arabi dopsis thalia nal]
164585	ATU026 525	ATL8C4 0664:8 50..48 6	nap									g48862 75	93	436	2.0e- 26	(AL050 300) hypoth etical protei n [Arabi dopsis thalia nal]
164586	ATU026 526	ATL8C1 4033:1 ..3183	nap									g42636 55	93	3029	8.4e- 281	(AC006 136) putati ve revers e transc riptas e

164587	ATU026 527	ATL8S2 435:1. .506	nap						1.00	g13372 9	92	279	2.9e- 07	[Arabi dopsis thalia nal] CHLORO PLAST 30S RIBOSO MAL PROTEI N S11 [Nicot iana tabacu m]
164588	ATU026 528	ATL8S2 8194:1 ..441	nap						0.99	g16517 77	92	220	1.4e- 17	(D9090 0) bacter ioferr itin comigr atory protei n [Synec hocyst is sp.]
164589	ATU026 529	ATL8C1 6395:3 511..1 650	nap						0.98	g73148 5	92	621	5.1e- 67	HYPOTH ETICAL 62.3 KD PROTEI N IN PTP3- ILV1 INTERG ENIC REGION [Sacch

164590	ATU026 530	ATL8S9 124:55 5..76	nap					ATL8S9 124:50 7..88	0.97	954839 1	92	364	3.6e- 28	TRANSC RIPTIO N ANTITE RMINAT ION PROTEI N NUSG [Bacil lus subtil is]	aromyc es cerevi siae]
164591	ATU026 531	ATL8S1 1215:5 66..12 8	nap					ATL8S1 1215:2 17..12 8	0.97	911768 18	92	201	5.0e- 14	HYPOTH ETICAL 14.8 KD PROTEI N IN AGAI- MTR INTERG ENIC REGION (O131) [Esche richia coli]	
164592	ATU026 532	ATL8C3 7147:1 001..1	nap					ATL8C3 7147:1 001..2 1	0.93	933351 71	92	462		(AF067 858) embryo - specif ic protei n 3 [Arabi	

164593	ATU026 533	ATL8C3 5427:1 ..1582	nap					ATL8C3 5427:2 19..15 32	0.92	g29441 80	92	752	1.4e- 82	dopsis thalia na] (AF007 779) trehal ose-6- phosph ate phosph atase [Arabi dopsis thalia na]
164594	ATU026 534	ATL8C4 8082:2 834..3 99	nap					ATL8C4 8082:2 693..4 80	0.90	g32015 54	92	2081	2.2e- 215	(AJ006 501) beta- D- glucos idase [Tropa eolum majus]
164595	ATU026 535	ATL8C3 1033:2 404..1 06	nap					ATL8C3 1033:9 03..10 6, ATL8C3 1033:2 382..1 885	0.87, 0.99	g47739 14	92	775	2.4e- 59	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
164596	ATU026 536	ATL8C4 0763:1 ..4543	nap					ATL8C4 0763:1 91..45 43	0.86	g42638 25	92	4471	0.0	(AC006 067) hypo thetical protei

164597	ATU026 537	ATL8C8 045:52 51..22 14	nap						ATL8C8 045:45 05..22 14	0.85	g16536 19	92	288	3.5e- 23	n [Arabi dopsis thalia nal] (D9091 5) spermi dine/p utresc ine- bindin g peripl asmic protei n [Synec hocyst is sp.]
164598	ATU026 538	ATL8S2 6986:3 00..56 7	nap						ATL8S2 6986:3 00..51 2	0.83	g11825 8	92	287		DNA- BINDIN G PROTEI N HU- BETA (NS1) (HU-1) [Esche richia coli]
164599	ATU026 539	ATL8C8 641:83 5..1	nap						ATL8C8 641:83 5..115	0.83	g26512 99	92	349	1.1e- 39	(AC002 336) putati ve serine /threo nine protei

164600	ATU026 540	ATL8C4 2125:1 ..1299	nap							ATL8C4 2125:1 30..12 90	0.81	940068 77	92	1061	5.3e- 95	n kinase [Arabi dopsis thalia na] (Z9970 7) RNA- bindin g like protei n [Arabi dopsis thalia na]
164601	ATU026 541	ATL8S3 414:1. .529	nap							ATL8S3 414:47 ..529	0.80	928087 24	92	178	9.4e- 13	(AL021 428) hypoth etical protei n Rv0067 c [Mycob acteri um tuberc ulosis]
164602	ATU026 542	ATL8S3 229:1. .507	nap							ATL8S3 229:7. .438	0.78	939154 50	92	365	7.7e- 37	HYPOTH ETICAL 20.3 KD PROTEI N IN PRC- PPHA INTERG

164603	ATU026 543	ATL8C4 9901:9 501..6 701	nap						ATL8C4 9901:9 372..7 050	0.77		g44173 09	92	3017	0.0	ENIC REGION [Esche richia coli] (AC006 446) putati ve pol ypr otei with a revers e transc riptas e domain [Arabi dopsis thalia na]
164604	ATU026 544	ATL8C1 3483:1 649..3 001	nap						ATL8C1 3483:1 649..2 814	0.75		g42204 90	92	1014	2.2e- 74	(AC006 069) hypoth etical protei n [Arabi dopsis thalia na]
164605	ATU026 545	ATL8C4 9397:5 634..1	nap						ATL8C4 9397:5 120..2 56	0.73		g45443 72	92	2994	0.0	(AC006 920) putati ve revers e transc riptas

164606	ATU026 546	ATL8C4 6535:1 ..5205	nap						ATL8C4 6535:1 82..51 50	0.72	g42204 49	92	4952	0.0	e [Arabi dopsis thalia na] (AC006 216) Strong simila rity to [Arabi dopsis thalia na]
164607	ATU026 547	ATL8C4 0382:3 552..6 11	nap						ATL8C4 0382:3 222..6 58	0.71	g36458 99	92	4874	0.0	(U6840 8) 5' end not determ ined experi mental ly [Zea mays]
164608	ATU026 548	ATL8C5 0077:1 ..3308	nap						ATL8C5 0077:1 955..3 170	0.65	g44328 02	92	3625	0.0	(AC006 437) putati ve pol polypr oteins, 5, partia l [Arabi dopsis thalia na]
164609	ATU026	ATL8C4	nap						ATL8C4	0.64	g44552	92	832	7.4e-	(AL035

164610	549	7823:1 114..2 997					7823:1 114..2 407	0.63	g38515 59	92	446	5.9e- 38	440) putati ve protei n [Arabi dopsis thalia na]
		ATL8C7 01:165 1..200	nap				ATL8C7 01:123 2..348						(AF084 829) methyl chlori de transf erase [Batis mariti ma]
164611		ATL8C3 742:10 63..38 70	nap				ATL8C3 742:10 64..37 10	0.59	g30636 97	92	820	6.5e- 102	(AL022 537) putati ve myb- protei n (parti al) [Arabi dopsis thalia na]
164612		ATL8C2 8561:1 643..1	nap				ATL8C2 8561:1 643..1 80	0.58	g45672 96	92	1659	2.4e- 159	(AC006 918) putati ve Athila retroee lement ORF1

164613	ATU026 553	ATL8C4 3910:8 98..63 65	nap						0.57	g45443 72	92	4184		protein [Arabi dopsis thalia na]
164614	ATU026 554	ATL8S1 481:1. .492	nap						0.57	g25000 21	92	199	1.7e- 10	PHOSPH ORIBOS YIAMIN OIMIDA ZOLECA RBOXAM IDE FORMYL TRANSF ERASE (AICAR TRANSF ORMYLA SE) / IMP CYCLOH YDROLA SE (INOSI NICASE) (IMP

164615	ATU026 555	ATL8S1 4838:7 78..13	nap							0.56	g32886 69	92	429	1.7e- 27	(D8641 1) Fmv [Vibri o alginol lyticu s]	SYNTHETASE) (ATIC) [Chromatium vinosum]
164616	ATU026 556	ATL8C4 6862:9 54..1	nap							0.55	g44552 97	92	724	8.4e- 78	(A1035 528) hypoth etical protein [Arabi dopsis thaliana]	
164617	ATU026 557	ATL8C3 2124:3 076..1 437	nap							0.55	g28092 51	92	1055	5.2e- 113	(AC002 560) F21B7. 20 [Arabi dopsis thaliana]	
164618	ATU026 558	ATL8C3 9907:5 63..51 03	nap							0.54, 0.53	g40380 56	92	3073	1.2e- 275	(AC005 897) putative transposon [Arabi dopsis]	

164619	ATU026 559	ATL8C2 8668:1 155..3 4	nap				ATL8C2 8668:8 14..15 1	0.52	g29795 58	92	1432	3.1e- 148	thalia na] (AC003 680) hypoth etical protei n [Arabi dopsis thalia na]
164620	ATU026 560	ATL8S2 7737:6 60..1	nap				ATL8S2 7737:6 60..11 3	0.48	g47417 92	92	208	1.6e- 17	(AF101 047) YadR [Haemo philus ducrey il]
164621	ATU026 561	ATL8C1 328:12 07..1	nap				ATL8C1 328:11 44..26 7	0.46	g41917 95	92	890	1.4e- 93	(AC005 917) putati ve zinc finger -like protei n [Arabi dopsis thalia na]
164622	ATU026 562	ATL8C3 9941:3 857..1	nap						g44173 09, g36953 97, g33778 34	92, 61, 58	3171, 438, 1706	0.0, 2.4e- 41, 4.2e- 151	(AC006 446) putati ve pol ypr oteins with a revers

164623	ATU026 563	ATL8C1 8650:1 ..405	nap	945876 18	92	207	2.7e- 12	(AC006 951) hypoth etical protei n [Arabi dopsis thalia
--------	---------------	---------------------------	-----	--------------	----	-----	-------------	---

164628	ATU026 568	ATL8C6 363:1. .396	nap										g80630 0	92	356	6.5e- 31	(M2542 7) unknown protein [Zea mays]	found [Arabi dopsis thalia na]
164629	ATU026 569	ATL8C1 6868:1 179..1	nap										g44328 68	92	862	2.7e- 75	(AC006 300) hypoth etical protein [Arabi dopsis thalia na]	
164630	ATU026 570	ATL8C2 6616:1 713..2 970	nap										g43143 83	92	91	2.0e- 13	(AC006 232) hypoth etical protein [Arabi dopsis thalia na]	
164631	ATU026 571	ATL8C2 2970:2 046..1 587	nap										g10767 86	92	584	0.025	hypoth etical protein n l - perenn ial teosin	

164632	ATU026 572	ATL8C4 9485:1 ..432	nap									g45127 00	92	378	9.6e- 25	(AC006 569) putati ve AP2 domain - contai ning protei n [Arabi dopsis thalia na]	te [Zea diplop erenni s]
164633	ATU026 573	ATL8C4 6161:1 ..428	nap									g54195 4	92	420	4.7e- 32	ubiqui tin extens ion protei n - white lupine [Lupin us albus]	ubiqui tin extens ion protei n - white lupine [Lupin us albus]
164634	ATU026 574	ATL8S2 8603:5 1..534	nap									g19050 6	92	83	0.9999 4	(K0320 6) saliva ry prolin e-rich protei n precu sor	(K0320 6) saliva ry prolin e-rich protei n precu sor

164635	ATU026 575	ATL8C3 5784:1 ..478	nap									g46894 77	92	429	1.0e- 17	[Homo sapien s] (AC007 213) pseud ogene [Arabi dopsis thalia na]
164636	ATU026 576	ATL8C1 6313:6 27..24 43	nap									g39129 24	92	2792	9.2e- 263	(AF001 308) CHP- rich hypoth etical protei n simila r to T10M13 .17.1 [Arabi dopsis thalia na]
164637	ATU026 577	ATL8C8 745:25 37..35 43	nap									g37383 35	92	416	3.9e- 46	(AC005 170) unknow n protei n [Arabi dopsis thalia na]
164638	ATU026 578	ATL8C4 240:45 3..1	nap									g31932 85	92	511	1.3e- 42	(AF069 298) T14P8.

164639	ATU026 579	ATL8C4 0457:4 69..1	nap										g43098 65	92	159	1.1e- 15	18 gene produc t [Arabi dopsis thalia na]
164640	ATU026 580	ATL8C3 227:28 18..78 5	nap										g39280 84	92	2123	1.9e- 231	(AC006 527) hypoth etical protei n [Arabi dopsis thalia na]
164641	ATU026 581	ATL8C1 0939:1 ..850	nap										g21197 07	92	97	0.0038	prolin e-rich protei n precu sor - rat []
164642	ATU026 582	ATL8C1 327:76 46..33	nap										g44173 09, g44173	92, 85, 80	3043, 426, 1871	1.1e- 266, 8.7e-	(AC006 446) putati

164643	ATU026 583	ATL8S1 4006:3 27..1	nap							01, g33778 34				32, 4.4e- 171	ve pol polypr oteins with a reverse transc riptase domain [Arabi dopsis thalia na]; (AC006 446) hypoth etical protein [Arabi dopsis thalia na]; (AF075 598) No defi nition line found [Arabi dopsis thalia na]
										g34492 68	92	180	1.1e- 14		(AL031 317) hypoth etical protein

164644	ATU026 584	ATL8S6 559:53 9..41	nap							g46894 77	92	577	(AC007 213) pseud ogene [Arabi dopsis thalia na]	SC6G4. 34 [Strep tomyce s coelic olor]
164645	ATU026 585	ATL8C1 305:1. .2446	nap						ATL8C1 305:50 ..483, ATL8C1 305:23 31..93 9	0.99, 0.55	91	1539	2.6e- 142	(AC006 220) putati ve polypr otein [Arabi dopsis thalia na]
164646	ATU026 586	ATL8C2 159:1. .450	nap						ATL8C2 159:47 ..450	0.99	91	548	2.6e- 43	(AC005 388) Simila r to T31E10 .22 [Arabi dopsis thalia na]
164647	ATU026 587	ATL8C1 3272:1 802..3 07	nap						ATL8C1 3272:1 400..3 07	0.97	91	694	1.1e- 58	(AJ002 990) nucleo tide

164648	ATU026 588	ATL8C4 1749:1 ..1014	nap						ATL8C4 1749:1 69..91 9	0.95	g42622 13	91	355	1.7e- 42	repair protei n [Liliu m longif lorum] (AC006 161) hypoth etical protei n [Arabi dopsis thalia na]
164649	ATU026 589	ATL8C1 5552:2 965..1	nap						ATL8C1 5552:2 965..3 09	0.89	g33373 61	91	1924	5.1e- 183	(AC004 481) ankyri n-like protei n [Arabi dopsis thalia na]
164650	ATU026 590	ATL8C4 2271:1 ..582	nap						ATL8C4 2271:5 1..582	0.88	g43372 05	91	624	5.5e- 65	(AC006 403) hypoth etical protei n [Arabi dopsis thalia na]
164651	ATU026 591	ATL8C2 35:811 ..1	nap						ATL8C2 35:811 ..41	0.88	g47339 87	91	165	2.2e- 10	(AC007 209) hypoth

164652	ATU026 592	ATL8S9 302:54 1..1	nap						ATL8S9 302:47 0..29	0.87	g27915 01	91	323	1.6e- 25	etical protei n [Arabi dopsis thalia na]
164653	ATU026 593	ATL8C1 0959:3 149..1	nap						ATL8C1 0959:2 989..4 15	0.86	g33602 89	91	956	8.6e- 75	(AF023 164) leucin e-rich repeat transm embran e protei n kinase 1 [Zea mays]
164654	ATU026 594	ATL8C3 3886:1 ..1727	nap						ATL8C3 3886:6 3..172 7	0.84	g26550 08	91	724		(AF017 144) (1-4)- beta- mannan endohy drolas e [Lycop ersico

164655	ATU026 595	ATL8C3 599:97 3..138	nap							ATL8C3 599:53 4..138	0.82		g33954 24	91	946	1.9e- 79	n escule ntum] (AC004 683) hypoth etical protei n [Arabi dopsis thalia na]
164656	ATU026 596	ATL8C1 1165:2 398..1	nap							ATL8C1 1165:2 398..1 40	0.80		g36081 35	91	932	3.8e- 56	(AC005 314) putati ve DNA bindin g factor [Arabi dopsis thalia na]
164657	ATU026 597	ATL8C3 8555:1 43..73 8	nap							ATL8C3 8555:1 43..71 2	0.79		g12843 7	91	158	1.5e- 16	CHITOO LIGOSA CCHARI DE DEACET YLASE (NODUL ATION PROTEI N B) [Rhizo bium trifol il]
164658	ATU026 598	ATL8C1 194:1.	nap							ATL8C1 194:65	0.77		g28327 08	91	1187	2.6e- 123	(AL021 713)

164659	ATU026 599	.1220	nap	ATL8C2 4116:1 463..3 36	ATL8C2 4116:1 400..3 36	0.77	g48504 06	91	1328	2.6e- 138	beta- 1, 3- glucan ase- like protei n [Arabi dopsis thalia nal (AC007 357) Contai ns simila rity to gb U42 445 Cf-2.2 from Lycope rsicon pimpin ellifo lium and contai ns 5 PF 005 60 Leucin e rich repeat domain s. [Arabi dopsis thalia
--------	---------------	-------	-----	----------------------------------	----------------------------------	------	--------------	----	------	--------------	--

164660	ATU026 600	ATL8C2 1163:1 35..39 51	nap				ATL8C2 1163:1 35..37 16	0.74	g37790 21	91	3982	0.0	na] (AC005 171) putati ve revers e transc riptas e [Arabi dopsis thalia na]
164661	ATU026 601	ATL8C5 0235:2 585..2 91	nap				ATL8C5 0235:2 471..2 91	0.74	g47739 20	91	2403	3.1e- 249	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]
164662	ATU026 602	ATL8C1 1598:4 472..1 72	nap				ATL8C1 1598:4 248..1 94	0.73	g43253 54	91	4789	0.0	(AF128 395) contai ns simila rity to retrov irus- relate d polypr oteins and to CCHC

164663	ATU026 603	ATL8S2 522:4. .501	nap						ATL8S2 522:14 ..501	0.73	g46804 89	91	334	1.3e- 29	zinc finger protein (Pfam: PF0009 8, Score= 16.3, E=0.05 1, E= 1) [Arabi dopsis thalia nal]
164664	ATU026 604	ATL8C2 3326:1 ..905	nap						ATL8C2 3326:5 3..869	0.68	g43097 05, g46462 24	91, 43	237, 379	7.7e- 20, 2.1e- 20	(AC006 266) putati ve Athila -like protein [Arabi dopsis thalia nal; (AC007 295) hypoth

164665	ATU026 605	ATL8C4 0441:8 32..1	nap					ATL8C4 0441:8 32..27	0.64	g33416 94	91	487	1.9e- 50	(AC003 672) PREG- like protei n [Arabi dopsis thalia na]
164666	ATU026 606	ATL8C7 264:21 0..706	nap					ATL8C7 264:21 0..425	0.64	g40564 92	91	200	4.2e- 20	(AC005 896) hypoth etical protei n [Arabi dopsis thalia na]
164667	ATU026 607	ATL8C1 9236:5 325..1	nap					ATL8C1 9236:5 325..1 7	0.63	g42204 56	91	1926	1.1e- 187	(AC006 216) Strong simila rity to [Arabi dopsis thalia na]
164668	ATU026 608	ATL8C4 919:24 5..115	nap					ATL8C4 919:50 3..107	0.60	g43888 23	91	632	3.4e- 57	(AC006 528) hypoth

164669	ATU026 609	1	ATL8C1 6261:1 611..1	nap							4	ATL8C1 6261:1 611..2 5	0.60	g36953 97	91	1290	2.9e- 93	etical protei n [Arabi dopsis thalia na]
164670	ATU026 610		ATL8C2 3729:2 736..1	nap								ATL8C2 3729:2 469..1 04	0.58	g46462 32	91	2893	1.2e- 300	(AC007 266) putati ve ligand -gated ion channe l protei n [Arabi dopsis thalia na]
164671	ATU026 611		ATL8C8 589:14 34..1	nap								ATL8C8 589:14 34..50 8	0.58	g13635 28	91	1357	3.3e- 120	gag protei n - maize [Zea mays]
164672	ATU026		ATL8C2	nap								ATL8C2	0.57,	g40380	91, 50	2208,	1.3e-	(AC005

612	4200:2 9..268 2				4200:4 7..204 5, ATL8C2 4200:2 550..2 251	0.98	50, g40380 53		444	226, 3.0e- 38	897) hypoth etical protei n [Arabi dopsis thalia na]; (AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
164673	ATU026 613	ATL8C3 2432:1 507..1 63	nap		ATL8C3 2432:1 449..2 10	0.56	g45824 55	91	365	6.5e- 40	(AC007 071) putati ve recept or protei n kinase [Arabi dopsis thalia na]
164674	ATU026 614	ATL8C6 800:20 31..1	nap		ATL8C6 800:18 16..22 6	0.53	g41853 10, g41853 09	91, 71	2252, 601	8.7e- 198, 2.7e- 52	(AF090 446) gag protei n [Zea mays]; (AF090

164675	ATU026 615	ATL8C9 815:85 4..1	nap							ATL8C9 815:85 4..37	0.52	g49143 63	91	734	1.6e- 51	446) unknown [Zea mays] (AC007 289) hypoth etical protein [Arabi dopsis thalia na]
164676	ATU026 616	ATL8C2 1171:1 874..1	nap							ATL8C2 1171:1 802..9 27	0.51	g42635 49	91	1861	4.6e- 196	(AC006 250) putati ve En/Spm transp oson hypoth etical protein n 1 [Arabi dopsis thalia na]
164677	ATU026 617	ATL8C1 4049:4 924..6 928	nap							ATL8C1 4049:5 794..6 839	0.50	g27087 42	91	653	2.9e- 64	(AC003 952) putati ve zinc- finger protein n [Arabi dopsis

164678	ATU026 618	ATL8C4 2006:1 943..5 151	nap					ATL8C4 2006:1 943..5 151	0.49		g37383 35	91	834	9.9e- 91	thalia na] (AC005 170) unknown n protei n [Arabi dopsis thalia na]
164679	ATU026 619	ATL8C9 485:1. .4885	nap					ATL8C9 485:97 ..4885	0.47		g42062 02, g42062 01	91, 84	1219, 1611	7.4e- 120, 7.4e- 179	(AF071 527) hypoth etical protei n [Arabi dopsis thalia na]; (AF071 527) hypoth etical protei n [Arabi dopsis thalia na]
164680	ATU026 620	ATL8S3 0334:5 57..30	nap								g22810 97	91	855	3.8e- 73	(AC002 333) hypoth etical protei n [Arabi dopsis na]

164681	ATU026 621	ATL8C2 2368:4 341...3 874	nap									g45586 84	91	461	1.4e- 25	thalia na] (AC006 586) hypoth etical protei n [Arabi dopsis thalia na]
164682	ATU026 622	ATL8S1 0076:5 11...30 8	nap									g21301 58	91	173	5.0e- 12	hypoth etical protei n 75 - maize chloro plast [Zea mays]
164683	ATU026 623	ATL8C1 5971:2 116...1 09	nap									g27087 42	91	630	3.0e- 53	(AC003 952) putati ve zinc- finger protei n [Arabi dopsis thalia na]
164684	ATU026 624	ATL8C1 0995:1 756...8 8	nap									g45860 36	91	756	4.6e- 75	(AC007 109) hypoth etical protei n [Arabi

164688	ATU026 628	ATL8C4 1058:1 ..840	nap							g47739 11	91	825	2.3e- 82	(AFL47 259) No defini tion line found [Arabi dopsis thalia na]	918) putati ve pol polypr otein [Arabi dopsis thalia na]
164689	ATU026 629	ATL8C2 3669:7 79..34 5	nap							g44172 75	91	352	6.8e- 35	(AC007 019) hypothe tical protei n [Arabi dopsis thalia na]	
164690	ATU026 630	ATL8C1 6260:9 14..1	nap							g44067 66	91	806	4.1e- 77	(AC006 836) putati ve flavon ol sulfot ransfe rase [Arabi	

164691	ATU026 631	ATL8C3 6551:2 090..1	nap							932427 13	91	1258	1.6e- 117	dopsis thalia nal (AC003 040) putati ve transp osase [Arabi dopsis thalia nal]
164692	ATU026 632	ATL8S3 0795:1 ..333	nap							934028 17	91	162	5.4e- 14	(AJ007 829) lacZ, [Cloni ng vector pGreen]
164693	ATU026 633	ATL8S1 7523:1 4..723	nap						0.97	939159 72	90	310	6.1e- 23	HYPOTH ETICAL ABC TRANSP ORTER PERMEA SE PROTEI N YCBM [Esche richia coli]
164694	ATU026 634	ATL8C4 9631:1 ..445	nap						0.97	917811 61	90	175	6.1e- 12	(Z8386 6) nrdH [Mycob acteri um tuberc

164695	ATU026 635	ATL8S1 9438:1 2..552	nap					ATL8S1 9438:6 0..485	0.96	g45844 97	90	198	4.7e- 22	ulosis] (AL049 587) putati ve IPP isomer ase [Strep tomyce s coelic olor]
164696	ATU026 636	ATL8S6 099:57 8..1	nap					ATL8S6 099:40 2..8	0.94	g29829 81	90	274	2.5e- 19	(AE000 682) endonu clease III [Aquif ex aeolic us]
164697	ATU026 637	ATL8C3 62:636 2..450 5	nap					ATL8C3 62:610 3..452 3	0.90	g45875 18	90	1311	2.2e- 133	(AC007 060) Strong simila rity to F19I3. 8 []
164698	ATU026 638	ATL8C1 5789:8 ..1982	nap					ATL8C1 5789:9 36..19 82	0.88	g18774 80	90	786	4.2e- 75	(U8927 0) short- chain alcohol dehydr ogenase [Trips

164699	ATU026 639	ATL8C3 3982:1 272..1	nap					ATL8C3 3982:1 168..1 73	0.87	g44553 05	90	1082		acum dactyl oides]
164700	ATU026 640	ATL8C4 042:23 90..17 58	nap					ATL8C4 042:22 78..17 58	0.86	g33778 46	90	497	8.0e- 49	(AL035 528) putati ve polyga lactur onase [Arabi dopsis thalia na]
164701	ATU026 641	ATL8C4 6205:1 2..993	nap					ATL8C4 6205:1 2..959	0.86	g26186 94	90	1135	2.0e- 104	(AC002 510) putati ve zinc- finger protei n [Arabi dopsis thalia na]
164702	ATU026 642	ATL8C1 7104:3 019..1	nap					ATL8C1 7104:2 717..1	0.85	g23426 90	90	2367	1.4e- 215	(AC000 106) Simila

164703	ATU026 643	ATL8C3 4996:1 413..7 8	nap						0.82	g36430 85	90	974	2.0e- 102	(AF075 580) protei n phosph atase- 2C; PP2C [Mesem bryant hemum crysta llinum]	r to Homo copine I (gb U8 3246). [Arabi dopsis thalia na]
164704	ATU026 644	ATL8C2 7609:3 052..7 78	nap						0.79	g46801 80	90	2081		(AF111 709) polypr oteins [Oryza sativa subsp. indica]	
164705	ATU026 645	ATL8C3 6620:8 85..53 63	nap						0.76	g25650 11	90	1049	1.5e- 88	(AC002 983) putati ve MuDR- A-like transp	

164706	ATU026 646	ATL8C4 7092:4 128..1	nap							0.73			g40068 33, g49143 18	90, 87	1785, 2409	1.6e- 187, 4.5e- 255	oson protei n [Arabi dopsis thalia na]
164707	ATU026 647	ATL8C4 0270:1 ..1470	nap							0.70			g47739 18	90	1253	2.3e- 131	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
164708	ATU026	ATL8C1	nap							0.69			g28298	90	310	5.1e-	(AC002 970) putati ve revers e transc riptas e [Arabi dopsis thalia na]; (AC005 489) F14N23 .4 [Arabi dopsis thalia na]

648	4767:1 0581.. 11154				4767:1 0605.. 11121	99				16	311) simila r to ripeni ng- induce d protei n, gp AJ0 01449 246501 5 and major# latex protei n, gp X91 961 11 07495 [Arabi dopsis thalia na]
164709	ATU026 649	nap			ATL8C5 0114:1 535..2 816	0.69	g47339 85	90	427	1.2e- 39	(AC007 209) hypoth etical protei n, 5, partia l [Arabi dopsis thalia na]
164710	ATU026 650	nap			ATL8C4 592:19 32..34 0	0.68	g33554 80	90	379	1.5e- 20	(AC004 218) Medica go

164711	ATU026 651	ATL8C3 2200:3 416..1	nap						ATL8C3 2200:1 074..7 1, ATL8C3 2200:2 329..1 622, ATL8C3 2200:3 416..2 717	0.57, 0.90, 0.94	g44328 02	90	3326	0.0	nodulin N21-like protein [Arabidopsis thaliana] (AC006437) putative polyprotein, 5, partial [Arabidopsis thaliana]
164712	ATU026 652	ATL8S7 730:1. .369	nap						ATL8S7 730:17 ..369	0.57	g14050 3	90	124	1.5e-05	HYPOTHETICAL 14 KD PROTEIN IN TRN1 INTRON (ORF 133) [Oryza sativa]
164713	ATU026 653	ATL8C2 7346:1 53..51 7	nap						ATL8C2 7346:1 71..46 8	0.57	g19033 58	90	259		(AC000104) Similar to Nicotiana

164714	ATU026 654	ATL8C2 9293:2 220..2 87	nap						ATL8C2 9293:2 163..2 87	0.56		g49268 66	90	1212	3.1e- 122	EREBP- 3 (gb D3 8124). [Arabi dopsis thalia na]
164715	ATU026 655	ATL8C3 4368:1 73..14 44	nap						ATL8C3 4368:1 73..13 82	0.52		g31766 92	90	1263	1.6e- 130	(AC003 671) F1707. 2 [Arabi dopsis thalia na]
164716	ATU026 656	ATL8C2 615:20 04..1	nap						ATL8C2 615:20 04..14 7	0.51		g44067 53	90	650	4.6e- 60	(AC006 836) hypoth etical protei n [Arabi dopsis thalia na]
164717	ATU026	ATL8C4	nap						ATL8C4	0.50		g36458	90	4517	0.0	(U6840

164719	ATU026 659	ATL8S1 5192:5 95..15 4	nap				ATL8S1 5192:5 14..15 4	0.47	g11734 60	90	315	9.6e- 29	SMALL PROTEI N B HOMOLO G [Strep tococc us faecal is]
164720	ATU026 660	ATL8C2 8269:9 11..1	nap				ATL8C2 8269:8 66..64	0.40	g30566 01	90	1115	8.8e- 103	(AC004 255) T1F9.2 2 [Arabi dopsis thalia na]
164721	ATU026 661	ATL8C4 1254:6 63..1	nap						g38855 11	90	99	3.5e- 05	(AF084 200) simila r to PSI-K subuni t of photos ystem I from barley [Medic ago sativa]
164722	ATU026 662	ATL8C3 9590:3 16..48 47	nap						g44328 07	90	2890	0.0	(AC006 570) putati ve polypr oteins [Arabi

164723	ATU026 663	ATL8C1 3839:2 108..3 52	nap										g44328 67	90	2825	2.8e- 286	dopsis thalia nal (AC006 300) putati ve dnaJ- like protei n [Arabi dopsis thalia nal]
164724	ATU026 664	ATL8C3 3361:1 193..1	nap										g26186 92	90	1053	1.2e- 110	(AC002 510) putati ve zinc- finger protei n [Arabi dopsis thalia nal]
164725	ATU026 665	ATL8S8 030:38 9..1	nap										g50102 7	90	104	0.995	(U0184 9) ORF2 [Trypa nosoma brucei]
164726	ATU026 666	ATL8C4 2547:9 68..1	nap										g33373 59	90	667	2.1e- 79	(AC004 481) hypoth etical protei n

164727	ATU026 667	ATL8C2 7252:8 80..1	nap										g48862 71	90	450		[Arabi dopsis thalia na]
164728	ATU026 668	ATL8S1 8375:5 2..537	nap										g11685 15	90	377	1.3e- 26	(AL050 300) putati ve protei n [Arabi dopsis thalia na]
164729	ATU026 669	ATL8C3 4802:7 40..32 2	nap										g17105 16	90	198	1.8e- 09	SHIKIM ATE KINASE (SK) [Haemo philus influe nzae Rd]
164730	ATU026 670	ATL8C1 288:1. .1310	nap										g41917 74	90	1134	1.9e- 119	60S RIBOSO MAL PROTEI N I22 [Gadus morhua]
																	(AC005 917) putati ve beta- 1,3- endogl ucanas e

164731	ATU026 671	ATL8C3 314:48 82..42 74	nap										g40380 66	90	554	7.4e- 34	[Arabi dopsis thalia na] (AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
164732	ATU026 672	ATL8C3 7490:1 220..1	nap										g43357 18	90	1234		(AC006 248) putati ve zinc- finger protei n [Arabi dopsis thalia na]
164733	ATU026 673	ATL8S1 8656:4 82..1	nap										g32566 44	90	94	7.5e- 08	(AP000 001) 175aa long hypoth etical protei n [Pyroc occus horiko shii]
164734	ATU026 674	ATL8C1 6198:9	nap										g30803 59	90	71	0.0005 0	(AL022 580)

164735	ATU026 675	85..66 6	nap							g33193 72	90	3649	0.0	(AF077 409) simila r to revers e transc riptions (PFam: rvt.hm m, score: 60.13) [Arabi dopsis thalia na]
164736	ATU026 676	ATL8S1 6989:4 61..1	nap							g17033 39	90	279		BIS(5' - NUCLEO SYL)- TETRAP HOSPHA TASE (ASYMM ETRICA L) (DIADEN OSINE 5',5', '-

679	0069:1 ..878								07		92	134) putati ve revers e transc riptas e [Arabi dopsis thalia na]
164740	ATU026 680	ATL8S1 5487:1 ..324	nap						g77341 4	90	174	5.3e- 15 (U2375 1) beta galact osidas e [Cloni ng vector pBBR1M CS-5]
164741	ATU026 681	ATL8C2 0682:2 523..1	nap					ATL8C2 0682:2 523..1 86	g47738 88	89	2597	3.7e- 269 (AF076 243) putati ve recept or- like protei n kinase [Arabi dopsis thalia na]
164742	ATU026 682	ATL8C1 367:1. .1058	nap					ATL8C1 367:37 1..105	g42622 13	89	1057	5.7e- 109 (AC006 161) hypoth

164743	ATU026 683	ATL8C2 6275:3 572..6 46	nap						ATL8C2 6275:2 716..1 271	0.97	g48357 67	89	549	6.9e- 59	etical protei n [Arabi dopsis thalia na] (AC007 202) T8K14. 16 [Arabi dopsis thalia na]
164744	ATU026 684	ATL8C2 3164:1 98..87 2	nap						ATL8C2 3164:1 98..75 7	0.96	g31282 22	89	181	1.4e- 14	(AC004 077) MADS Box protei n AGL29 [Arabi dopsis thalia na]
164745	ATU026 685	ATL8C1 647:21 5..139 5	nap						ATL8C1 647:21 5..138 0	0.96	g38926 99	89	107	5.9e- 21	(AL033 545) hypoth etical protei n (fragm ent) [Arabi dopsis thalia na]
164746	ATU026 686	ATL8C4 9175:1	nap						ATL8C4 9175:8	0.92	g48369 51	89	128	1.1e- 07	(AC006 085)

164747	ATU026 687	..375	nap				9..375	0.92	g32928 49	89	162	1.8e- 13	Hypothetical protein [Arabidopsis thaliana] (AJ007582) arginine methyltransferase [Arabidopsis thaliana] (U12757) diphenol oxidase [Acer pseudoplatanus] (AL049500) putative protein [Arabidopsis thaliana] (AC005
164748	ATU026 688	ATL8C3 4937:1 ..2916	nap				ATL8C3 4937:1 28..29 16	0.91	g52935 3	89	1122	3.0e- 107	
164749	ATU026 689	ATL8C2 6519:5 21..23 88	nap				ATL8C2 6519:5 21..23 36	0.88	g45394 60	89	460	1.3e- 45	
164750	ATU026	ATL8C7	nap				ATL8C7	0.86	g40564	89	1030	2.6e-	

164751	690	17:151 6..1	nap				17:133 0..569	0.86	g15725 64	89	591	116	990) Simila r to [Arabi dopsis thalia na]
	ATU026 691	ATL8S2 2741:4 58..1	nap				ATL8S2 2741:4 58..11 9	0.86				2.0e- 59	(U6719 4) Upf31. 0 [Enter obacte r aeroge nes]
164752	ATU026 692	ATL8C1 3534:4 610..7 719	nap				ATL8C1 3534:4 610..6 612	0.81	g39012 68	89	659	1.1e- 40	(AF060 173) SV2 relate d protei n [Rattu s norveg icus]
164753	ATU026 693	ATL8C3 654:37 9..250 9	nap				ATL8C3 654:43 2..247 3	0.81	g42630 63	89	2283	4.2e- 179	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
164754	ATU026 694	ATL8C4 1994:8 9..382	nap				ATL8C4 1994:8 9..252	0.77	g48369 29	89	1566	1.2e- 111	(AC006 085) Hypoth

164755	ATU026 695	1								5		0.77		g30333 86	89	452	2.9e- 41	etical protei n [Arabi dopsis thalia na]
		ATL8C1 9035:4 199..2 315	nap							ATL8C1 9035:4 199..2 315								(AC004 238) RING3- like protei n [Arabi dopsis thalia na]
164756	ATU026 696											0.77		g44552 07	89	102	0.0002 3	(AL035 440) ubiqui tin- like protei n [Arabi dopsis thalia na]
		ATL8C2 842:59 2..1	nap							ATL8C2 842:58 3..36								
164757	ATU026 697											0.76		g22931 55	89	201	1.3e- 15	(AF008 220) Ytia [Bacil lus subtil is]
		ATL8S1 1612:2 20..1	nap							ATL8S1 1612:2 20..11								
164758	ATU026 698											0.76		g20519 79	89	171	2.7e- 06	(U9449 4) teosin te branch
		ATL8C2 0545:1 366..1	nap							ATL8C2 0545:1 171..2 44								

164762	ATU026 702	ATL8C4 4795:1 2075.. 1	nap				ATL8C4 4795:8 644..2 96, ATL8C4 4795:1 2075.. 9216 ₁	0.72, 0.81	g44327 97, g42635 44	89, 30	2692, 1547	1.7e- 228, 1.8e- 154	(AC006 437) putati ve pol polypr oteins [Arabi dopsis thalia na]; (AC006 250) putati ve Athila retroo lement ORF1 protei n [Arabi dopsis thalia na]
164763	ATU026 703	ATL8S2 1529:3 75..1	nap				ATL8S2 1529:3 75..43	0.70	g45123 55	89	101	2.2e- 08	(AB011 836) simila r to B.subt ilis ywgB gene (2 7%- identi ty) [Bacil lus halodu rans]
164764	ATU026	ATL8C3	nap				ATL8C3	0.67	g15183	89	209	2.6e-	(Z7072

164765	704	8829:1 ..588					8829:8 0..518	95				16	4) ORF2 [Strep tomyce s livida ns]
164766	ATU026 705	ATL8C1 0351:1 ..4697	nap				ATL8C1 0351:7 79..32 46	0.67	g46801 80, g44327 97	89, 77	900, 2740		(AF111 709) polypr otein [Oryza sativa subsp. indica]; (AC006 437) putati ve pol polypr otein [Arabi dopsis thalia na]
164767	ATU026 706	ATL8C1 1709:4 87..1	nap				ATL8C1 1709:4 87..13 8	0.67	g28424 83	89	583	4.8e- 59	(AL021 749) hypoth etical protei n [Arabi dopsis thalia na]
164768	ATU026 707	ATL8C4 2448:2 226..7 27	nap				ATL8C4 2448:2 075..7 52	0.66	g28326 36	89	727	4.8e- 86	(AL021 711) hypoth etical

164768	ATU026 708	ATL8S9 947:43 1..1	nap					ATL8S9 947:43 1..36	0.63	g25982 23	89	272	3.4e- 26	(Y0869 6) aldehy dehydr ogenase subunit III [Acetobacter europa eus]
164769	ATU026 709	ATL8C1 0239:8 70..1	nap					ATL8C1 0239:8 04..17 2	0.62	g43371 93	89	487		(AC006 403) hypoth etical protein [Arabis dopsis thaliana]
164770	ATU026 710	ATL8C4 7227:1 ..2719	nap					ATL8C4 7227:5 03..18 07	0.60	g37790 29	89	575	1.0e- 59	(AC005 171) putative zinc finger protein [Arabis dopsis thaliana]

164771	ATU026 711	ATL8S1 6872:1 ..436	nap				ATL8S1 6872:5 8..329	0.60	g32362 43	89	533	5.5e- 41	na] (AC004 684) hypoth etical protei n [Arabi dopsis thalia na]
164772	ATU026 712	ATL8C4 0576:4 310..2 11	nap				ATL8C4 0576:4 139..2 11	0.59	g47739 20, g43097 68	89, 32	2725, 337	1.5e- 260, 1.3e- 05	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]; (AC006 217) putati ve Athila retroee lement ORF1 protei n [Arabi dopsis thalia na]
164773	ATU026 713	ATL8C4 76:405 3..227 2	nap				ATL8C4 76:373 2..227 5	0.58	g24941 13	89	1516	1.9e- 149	(AC002 376) Strong simila

164778	ATU026 718	ATL8C1 415:68 53..15 98	nap				ATL8C1 415:67 91..17 15	0.45	g45443 72	89	4758	0.0	na] (AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
164779	ATU026 719	ATL8C4 595:17 30..63	nap				ATL8C4 595:13 46..63	0.44	g31842 79	89	2313	3.9e- 236	(AC004 136) hypoth etical protei n [Arabi dopsis thalia na]
164780	ATU026 720	ATL8C2 307:11 75..15 59	nap						g28326 73	89	126	4.5e- 13	(AL021 712) hypoth etical protei n [Arabi dopsis thalia na]
164781	ATU026 721	ATL8S1 0786:1 ..373	nap						g50102 7	89	141	0.0005 5	(U0184 9) ORF2 [Trypa nosoma brucei

164782	ATU026 722	ATL8S1 0290:5 82..25	nap							g24988 94	89	253	3.1e- 21	PUTATI VE SERINE CYCLE ENZYME (ORF4) [Methy lobact erium extorq uens]
164783	ATU026 723	ATL8C4 1524:8 0..654	nap							g17551 62	89	587	6.3e- 58	(U7519 2) germin -like protei n [Arabi dopsis thalia na]
164784	ATU026 724	ATL8C2 1333:4 7..109 1	nap							g45804 69	89	1570	1.2e- 146	(AC006 081) putati ve zinc finger protei n [Arabi dopsis thalia na]
164785	ATU026 725	ATL8C4 6029:2 400..1 602	nap							g43097 03	89	937	5.0e- 93	(AC006 266) putati ve transp oson

164786	ATU026 726	ATL8C9 357:65 28..79 3	nap							g45443 72	89	3782	0.0	protein [Arabis dopsis thaliana]
164787	ATU026 727	ATL8C1 6296:1 176..2 825	nap							g10022 6	89	824	4.3e- 88	hypothetical protein - tomato [Lycopersicon esculentum]
164788	ATU026 728	ATL8C1 4210:1 462..1 16	nap							g17698 97	89	756	1.3e- 79	(Y08010) lectin receptor kinase [Arabis dopsis thaliana]
164789	ATU026	ATL8C2	nap							g45586	89	130	1.3e-	(AC006 920) putative reverse transcriptase [Arabis dopsis thaliana]

729	2781:1 ..789								78				14	586) unknow n protei n [Arabi dopsis thalia na]
164790	ATU026 730	ATL8C2 2404:1 958..1 057	nap						g33778 53	89	1155	1.1e- 109	(AF076 274) No defini tion line found [Arabi dopsis thalia na]	
164791	ATU026 731	ATL8C4 401:79 4..132 6	nap						g31933 15	89	310	4.5e- 20	(AF069 299) contai ns simila rity to transc riptio nal activa tor Ra [Arabi dopsis thalia na]	
164792	ATU026 732	ATL8C1 3799:1 ..338	nap						g22528 54	89	258	1.5e- 17	(AF013 294) simila r to	

164793	ATU026 733	ATL8C3 4505:7 750..2 095	nap							g45443 72	89	3359	0.0	auxin- induced protein [Arabi dopsis thalia na]
164794	ATU026 734	ATL8C1 8820:6 39..10 07	nap							g30972 60	89	94	1.1e- 07	(AC006 920) putative reverse transcrip tase [Arabi dopsis thalia na]
164795	ATU026 735	ATL8C2 218:11 07..54 20	nap							g33193 72	89	3650	0.0	(AJ005 741) self-incom patibility [Papaver rhoeas]
														(AF077 409) similar to reverse transcrip tase

164796	ATU026 736	ATL8S4 45:1.. 467	nap					ATL8S4 45:51. .467	0.99	g24955 50	88	237	9.7e- 25	HYPOTH ETICAL 19.5 KD PROTEI N IN EMRE- RUS INTERG ENIC REGION [Esche richia coli]	es (PFam: rvt.hm m, score: 60.13) [Arabi dopsis thalia na]
164797	ATU026 737	ATL8C4 2741:3 44..13 89	nap					ATL8C4 2741:4 18..13 27	0.98	g35102 55	88	646	1.2e- 68	(AC005 310) hypoth etical protei n [Arabi dopsis thalia na]	(AF058 919) No defini tion line
164798	ATU026 738	ATL8C1 4877:2 95..97 5	nap					ATL8C1 4877:2 95..60 4	0.97	g30471 13	88	761	2.4e- 60	(AF058 919) No defini tion line	(AF058 919) No defini tion line

164799	ATU026 739	ATL8C4 3976:1 236..1	nap						ATL8C4 3976:1 236..2 17	0.92			g36953 97	88	1371		found [Arabi dopsis thalia na]
																	(AF096 372) No defini tion line found [Arabi dopsis thalia na]
164800	ATU026 740	ATL8C1 878:1. .1423	nap						ATL8C1 878:73 ..1423	0.92			g18413 99	88	232	3.7e- 18	(Z3466 1) AtTFII B2 [Arabi dopsis thalia na]
164801	ATU026 741	ATL8C2 7374:2 834..5 48	nap						ATL8C2 7374:2 448..5 92	0.90			g31281 91	88	1248		(AC004 521) putati ve beta- glucos idase [Arabi dopsis thalia na]
164802	ATU026 742	ATL8C1 8848:1 ..528	nap						ATL8C1 8848:4 98..40	0.89			g11467 9, g11685 93	88, 48	234, 191	2.8e- 09, 1.8e- 14	ATP SYNTA SE C CHAIN (LIPID

164805	ATU026 745	ATL8C4 228:15 29..1	nap						ATL8C4 228:15 08..58	0.87	g43371 91	88	1011	5.9e- 93	[Arabi dopsis thalia nal; (AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
164806	ATU026 746	ATL8C2 2540:4 00..18 27	nap						ATL8C2 2540:4 00..16 08	0.86	g38610 36	88	111	1.1e- 11	(AJ235 272) PUTRES CINE- ORNITH INE ANTIPO RTER (pote) [Ricke ttsia prowaz ekii]

164807	ATU026747	ATL8C1296:2617..991	nap				ATL8C1296:2388..1015	0.83	g4926867	88	852	8.6e-95	(AC007509) serine acetyl transferase (GB:AF112303) [Arabidopsis thaliana]
164808	ATU026748	ATL8C48313:5367..6124	nap				ATL8C48313:5367..6091	0.80	g440965	88	229	7.6e-16	(S66876) orf in promoter of Lhca3. St.1 [Solanum tuberosum]
164809	ATU026749	ATL8C44491:3151..35	nap				ATL8C44491:3044..125	0.75	g3080362	88	2459	4.9e-251	(AL022580) hypothetical protein [Arabidopsis thaliana]
164810	ATU026750	ATL8C4354:1..1838	nap				ATL8C4354:318..1838	0.74	g4056506	88	372	7.4e-33	(AC005896) nodulin-like protein

164811	ATU026 751	ATL8C4 7651:6 ..1265	nap							ATL8C4 7651:6 ..1249	0.74	g32362 41	88	454	6.9e- 29	[Arabi dopsis thalia na] (AC004 684) putati ve zinc finger protei n [Arabi dopsis thalia na]
164812	ATU026 752	ATL8C3 5696:1 ..3152	nap							ATL8C3 5696:9 6..315 2	0.73	g44540 11	88	1848	6.9e- 161	(AL035 396) putati ve protei n [Arabi dopsis thalia na]
164813	ATU026 753	ATL8C5 6:2391 ..1	nap							ATL8C5 6:2077 ..111	0.73	g45444 50	88	613	3.6e- 50	(AC006 592) hypoth etical protei n [Arabi dopsis thalia na]
164814	ATU026 754	ATL8C4 2078:3 149..1 647	nap							ATL8C4 2078:2 689..1 647	0.69	g45876 08	88	294	4.7e- 28	(AC006 951) putati ve

164815	ATU026 755	ATL8C3 6585:2 882..5 56	nap					ATL8C3 6585:2 815..5 56	0.65	g22526 30	88	989	4.9e- 68	polyga lactur onase [Arabi dopsis thalia na] (U9597 3) hypoth etical protei n [Arabi dopsis thalia na]
164816	ATU026 756	ATL8C1 3947:1 117..1	nap					ATL8C1 3947:8 53..35	0.62	g24628 29	88	940	2.3e- 92	(AF000 657) unknow n protei n [Arabi dopsis thalia na]
164817	ATU026 757	ATL8C3 3831:1 ..1396	nap					ATL8C3 3831:1 19..13 96	0.62	g39534 77	88	1756		(AC002 328) F2202. 22 [Arabi dopsis thalia na]
164818	ATU026 758	ATL8C4 7968:1 26..19 61	nap					ATL8C4 7968:1 71..19 61	0.58	g48503 84	88	958	7.6e- 90	(AC007 357) F3F19. 3 [Arabi

164819	ATU026 759	ATL8S4 851:53 0..1	nap						ATL8S4 851:48 0..76	0.47	g28296 43	88	74	0.067	dopsis thalia nal HYPOTH ETICAL 20.5 KD PROTEI N IN XTHA- GDHA INTERG ENIC REGION [Esche richia coli]
164820	ATU026 760	ATL8C4 411:1. .2779	nap						ATL8C4 411:27 7..276 8	0.46	g41917 90, g32506 76	88, 50	632, 186	9.0e- 70, 9.9e- 17	(AC005 917) putati ve zinc (ring) finger protei n [Arabi dopsis thalia nal; (AL024 486) putati ve protei n [Arabi dopsis thalia nal]

164821	ATU026 761	ATL8C1 7788:3 292..1	nap				ATL8C1 7788:2 890..4 2	0.46	g33193 67, g14028 81	88, 66	1107, 1826	1.0e- 102, 3.5e- 180	(AF077 409) No defini tion line found [Arabi dopsis thalia na]; (X9813 0) non- ltr retrot ranspo son revers e transc riptas e-like protei n [Arabi dopsis thalia na]
164822	ATU026 762	ATL8C2 4319:1 170..1	nap				ATL8C2 4319:1 170..1 33	0.45	g34452 10	88	1606	9.4e- 155	(AC004 786) putati ve flavon ol 3- o- glucos yltran sferas e

164823	ATU026 763	ATL8C3 3975:2 13..15 02	nap						ATL8C3 3975:2 13..10 75	0.43		g48502 89	88	295		[Arabi dopsis thalia na]
164824	ATU026 764	ATL8C1 9603:1 546..1	nap						ATL8C1 9603:1 546..1 51	0.41		g45843 59	88	858	7.1e- 42	(AL049 876) putati ve protei n [Arabi dopsis thalia na]
164825	ATU026 765	ATL8C2 6711:1 54..17 11	nap									g41853 10	88	1862	2.7e- 167	(AC006 420) hypoth etical protei n [Arabi dopsis thalia na]
164826	ATU026 766	ATL8C3 009:15 73..26 5	nap									g38691 90	88	2014	2.9e- 174	(AF090 446) gag protei n [Zea mays] (AB005 746) inorga nic phosph ate transp orter [Arabi

164842	ATU026 782	ATL8C1 2307:1 352..1 28	nap					ATL8C1 2307:1 292..8 37	0.97	g47552 03	87	185	2.0e- 16	dopsis thalia nal (AC007 018) hypoth etical protei n [Arabi dopsis thalia nal]
164843	ATU026 783	ATL8S1 9622:2 9..624	nap					ATL8S1 9622:2 9..562	0.97	g16556 53	87	108	3.4e- 09	(Z8136 8) hypoth etical protei n Rv2406 c [Mycob acteri um tuberc ulosis]
164844	ATU026 784	ATL8C3 9848:5 0..241 8	nap					ATL8C3 9848:5 0..234 0	0.95	g10764 16	87	2542	3.2e- 247	sulfit e reduct ase (ferre doxin) (EC 1.8.7. 1) precu sor - Arabid opsis

164845	ATU026 785	ATL8C2 8312:1 ..1154	nap					ATL8C2 8312:6 1..107 7	0.94	g20886 53	87	1304	6.7e- 136	thalia na [Arabi dopsis thalia na]
164846	ATU026 786	ATL8C1 432:13 18..11 3	nap					ATL8C1 432:12 71..11 3	0.94	g40068 23	87	452	8.7e- 35	(AC005 970) hypoth etical protei n [Arabi dopsis thalia na]
164847	ATU026 787	ATL8C2 2113:8 04..1	nap					ATL8C2 2113:1 38..8	0.92	g11731 05	87	410	1.5e- 42	RIBONU CLEASE 3 PRECUR SOR [Arabi dopsis thalia na]
164848	ATU026 788	ATL8C1 5632:3	nap					ATL8C1 5632:3	0.92	g46999 42	87	628	6.8e- 52	(AC007 166)

164849	ATU026 789	479..2 128	nap				315..2 128	0.80	g42630 50	87	334			putative receptor protein kinase [Arabi dopsis thaliana]
164850	ATU026 790	ATL8C2 7285:8 37..1	nap				ATL8C2 7285:8 37..7	0.79	g39351 40	87	128	1.8e- 09		(AC005 142) putative nodulin [Arabi dopsis thaliana]
164851	ATU026 791	ATL8C1 7730:2 513..1	nap				ATL8C1 7730:2 431..2 57	0.78	g42062 02	87	1103	6.9e- 110		(AF071 527) hypothetical protein [Arabi dopsis thaliana]
164852	ATU026	ATL8C8	nap				ATL8C8	0.78	g17105	87	521	7.9e-	60S	

164855	ATU026 795	ATL8C6 152:1. .2137	nap							ATL8C6 152:23 3..207 4	0.76		g42062 02	87	1073	9.4e- 95	region [Arabi dopsis thalia nal] (AF071 527) hypoth etical protei n [Arabi dopsis thalia nal]
164856	ATU026 796	ATL8C2 0605:4 9..727	nap							ATL8C2 0605:4 9..417	0.73		g29472 23	87	99	8.6e- 08	(AF022 773) ORF3 [Lacto coccus bacter iophag e phi31]
164857	ATU026 797	ATL8C1 6779:3 45..28 99	nap							ATL8C1 6779:3 45..28 77	0.70		g44328 03	87	1475	1.7e- 139	(AC006 437) putati ve PttA2 protei n [Arabi dopsis thalia nal]
164858	ATU026 798	ATL8C2 7214:1 095..1	nap							ATL8C2 7214:1 095..2 3	0.70		g48367 87	87	546	4.0e- 51	(AF143 681) cell cycle checkp

164859	ATU026 799	ATL8C1 8257:9 77..1	nap					ATL8C1 8257:9 65..22	0.68	g34174 49, g24974 92	87, 56	427, 434	5.3e- 38, 8.2e- 42	(AB010 087) riboso me recycl ing factor [Pseud omonas aerugi nos]; URIDYL ATE KINASE (UK) (URIDI NE MONOPH OSPHAT E KINASE (UMP) KINASE) [Synec hocyst is sp.]
164860	ATU026 800	ATL8C1 2587:2 61..65 66	nap					ATL8C1 2587:2 61..65 66	0.67	g26879 42	87	138	0.0093	(AE001 119) hemoly sin (tlyC)

164861	ATU026 801	ATL8S3 610:54 9..21	nap					ATL8S3 610:49 3..21	0.66	g20726 66	87	147	2.5e- 11	[Borre lia burgdo rferi] (Z9512 0) whiB1 [Mycob acteri um tuberc ulosis]
164862	ATU026 802	ATL8C3 7673:5 76..1	nap					ATL8C3 7673:5 76..12 1	0.65	g40564 15	87	313	1.3e- 30	(AC005 322) Simila r to the end of DNA repair protei n gb X74 615 (rad8) gene. [Arabi dopsis thalia na]
164863	ATU026 803	ATL8C2 8338:1 351..2 5	nap					ATL8C2 8338:1 143..2 5	0.62	g11736 38	87	954	1.4e- 88	(U3577 9) 1- aminoc yclopr opane- 1- carbox ylate syntha

164864	ATU026 804	ATL8C4 8804:6 18..24 09	nap						ATL8C4 8804:6 18..23 88	0.60	g36953 82	87	958	3.4e- 83	se [Triti cum aestiv um] (AF096 370) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Tall-1 (GB:L4 7193) [Arabi dopsis thalia na]
164865	ATU026 805	ATL8C4 6384:1 7..760	nap						ATL8C4 6384:2 87..69 8	0.58	g23410 24	87	597	1.1e- 52	(AC000 104) Fl9P19 .1 [Arabi dopsis thalia na]
164866	ATU026 806	ATL8C2 7379:9 50..1	nap						ATL8C2 7379:9 50..98	0.57	g23469 72	87	315		(AB006 598) ZPT2- 11 [Petun ia x

164867	ATU026 807	ATL8C8 655:71 0..1	nap				ATL8C8 655:49 8..124	0.54	954863 4	87	540	2.8e- 50	hybrid al PTS SYSTEM , SORBOS E- SPECIF IC IID COMPON ENT (EIID- SOR) (SORBO SE- PERMEA SE IID COMPON ENT) (PHOSP HOTRAN SFERAS E ENZYME II, D COMPON ENT) [Klebs iella pneumo niae]
164868	ATU026 808	ATL8C4 2041:1 789..1	nap				ATL8C4 2041:1 422..5 31	0.51	945860 66	87	1856	4.2e- 198	(AC006 194) putati ve pol polypr oteins, 3', partia l

164869	ATU026 809	ATL8C4 892:31 45..1	nap					ATL8C4 892:31 45..15 18	0.48	g30470 86	87	2799	1.8e- 268	[Arabi dopsis thalia na] (AF058 914) simila r to revers e transc riptas e (Pfam: transc ript_f act.hm m, score: 72.31) [Arabi dopsis thalia na]
164870	ATU026 810	ATL8S2 5066:5 64..58	nap					ATL8S2 5066:1 25..58	0.47	g24972 19	87	191	5.8e- 12	HYPOTH ETICAL 15.4 KD PROTEI N IN HAS1- JNM1 INTERG ENIC REGION [Sacch aromyc es cerevi siae]

164871	ATU026 811	ATL8C4 7612:1 ..3952	nap				ATL8C4 7612:9 2..320 9, ATL8C4 7612:3 885..3 773	0.41, 0.96	g29613 74	87	2095	3.1e- 211	(AL022 141) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]
164872	ATU026 812	ATL8C3 8064:1 036..1	nap						g48357 74	87	216	8.1e- 29	(AC007 296) EST gb AA6 05362 comes from this gene. [Arabi dopsis thalia na]
164873	ATU026 813	ATL8C2 6329:2 99..18 80	nap						g32928 33	87	398	3.9e- 18	(AL031 018) putati ve membra ne protei n [Arabi dopsis thalia na]
164874	ATU026	ATL8C3	nap						g28326	87	715	3.4e-	(AL021

	814	0254:5 34..10 53								75				45	712) hypoth etical protei n [Arabi dopsis thalia nal]
164875	ATU026 815	ATL8S1 1854:4 13..24 9	nap							g14031 8	87	128	7.3e- 08	HYPOTH ETICAL 6.5 KD PROTEI N (ORF 62) [Nicot iana tabacu m]	
164876	ATU026 816	ATL8C3 1067:3 830..2 907	nap							g43357 53	87	682	7.4e- 61	(AC006 284) unknow n protei n [Arabi dopsis thalia nal]	
164877	ATU026 817	ATL8C1 587:20 10..93 7	nap							g29110 81, g44903 39	87, 83	349, 283	6.7e- 45, 1.5e- 36	(AL021 960) putati ve protei n [Arabi dopsis thalia nal]; (AL035	

164878	ATU026 818	ATL8C2 0529:4 93..1	nap										g25071 50	87	423	7.6e- 41	656) putati ve. protei n [Arabi dopsis thalia na]
164879	ATU026 819	ATL8C1 4808:6 818..6 554	nap										g13378 8	87	167	6.4e- 10	CHLORO PLAST 30S RIBOSO MAL PROTEI N S14 [Nicot iana

164889	ATU026 829	ATL8C4 7182:1 024..3 14	nap				ATL8C4 7182:9 71..31 7	0.99	g49143 60	86	474	7.3e- 32	dopsis thalia nal (AC007 289) hypoth etical protei n [Arabi dopsis thalia nal]
164890	ATU026 830	ATL8C2 3634:6 24..1	nap				ATL8C2 3634:6 24..31	0.93	g28298 72	86	609	8.6e- 57	(AC002 396) Hypoth etical protei n [Arabi dopsis thalia nal]
164891	ATU026 831	ATL8C2 0805:2 254..1	nap				ATL8C2 0805:2 168..1 60	0.91	g47419 27	86	1341	4.5e- 139	(AF130 252) calciu m depend ent protei n kinase CP4 [Arabi dopsis thalia nal]
164892	ATU026 832	ATL8S3 0966:5 90..16	nap				ATL8S3 0966:5 45..16	0.90	g32565 26	86	152	1.1e- 12	(AP000 001) 158aa

164895	ATU026 835	ATL8C1 8185:3 92..1	nap					ATL8C1 8185:3 92..31	0.87	g10767 86	86	414	4.7e- 12	prote n [Arabi dopsis thalia na]
164896	ATU026 836	ATL8C2 9250:2 75..82 3	nap					ATL8C2 9250:2 75..59 4	0.84	g30470 70	86	413	2.3e- 37	(AF058 825) No defini tion line found [Arabi dopsis thalia na]
164897	ATU026 837	ATL8C3 6655:5 87..1	nap					ATL8C3 6655:5 87..22 2	0.84	g22621 76	86	246	5.5e- 17	(AC002 329) putati ve RING zinc- finger protei n [Arabi dopsis

164898	ATU026 838	ATL8C4 9292:3 5..184 5	nap					ATL8C4 9292:3 5..184 5	0.82		g40391 55	86	538	1.3e- 49	thalia na] (AF104 258) putati ve copper - induci ble 35.6 kDa protei n [Festu ca rubra]
164899	ATU026 839	ATL8C2 4725:2 899..1	nap					ATL8C2 4725:2 671..7 34	0.81		g45586 66, g23471 90	86, 84	512, 451	1.1e- 25, 2.7e- 41	(AC007 063) putati ve Na/H antipo rter isolog [Arabi dopsis thalia na]; (AC002 338) Na/H antipo rter isolog [Arabi dopsis thalia na]
164900	ATU026	ATL8C4	nap					ATL8C4	0.79		g28916	86	225	1.8e-	(L0379

164905	ATU026 845	ATL8S1 846:16 6..567	nap					ATL8S1 846:16 6..501	0.71	g10647 95	86	248	9.2e- 22	coli] (D7819 3) yydA [Bacil lus subtil is]
164906	ATU026 846	ATL8S2 3003:5 5..567	nap					ATL8S2 3003:5 5..553	0.68	g12045 0	86	374	1.8e- 32	POLYPE PTIDE DEFORM YLASE (PDF) (FORMY LMETHI ONINE DEFORM YLASE) [Esche richia coli]
164907	ATU026 847	ATL8C3 7749:1 522..1	nap					ATL8C3 7749:1 522..2 16	0.66	g29808 07	86	840	6.3e- 71	(AL022 197) hypoth etical protei n [Arabi dopsis thalia na]
164908	ATU026 848	ATL8C3 6846:2 077..3 998	nap					ATL8C3 6846:2 077..2 668, ATL8C3 6846:3 575..3 998	0.65, 0.68	g35488 07	86	127	7.9e- 06	(AC005 313) hypoth etical protei n [Arabi dopsis thalia

164909	ATU026 849	ATL8S1 9313:3 ..578	nap					ATL8S1 9313:1 7..556	0.64	g18176 87	86	155	4.5e- 11	na] (Z8472 4) hypoth etical protei n Rv0421 c [Mycob acteri um tuberc ulosis]
164910	ATU026 850	ATL8C2 35:777 5..584 3	nap					ATL8C2 35:750 0..587 .2	0.60	g43888 21	86	1398	4.1e- 138	(AC006 528) putati ve mudrA transp osase protei n [Arabi dopsis thalia na]
164911	ATU026 851	ATL8C2 5647:3 530..1	nap					ATL8C2 5647:3 467..1 553	0.56	g27087 43	86	3256	2.9e- 314	(AC003 952) putati ve Tal-1- like revers e transc riptas e [Arabi

164912	ATU026 852	ATL8C1 8222:1 ..1156	nap				ATL8C1 8222:4 28..86 3	0.55	g44689 88	86	1207	5.9e- 76	dopsis thalia nal (AL035 605) putati ve protei n [Arabi dopsis thalia nal]
164913	ATU026 853	ATL8S2 7475:4 61..12 3	nap				ATL8S2 7475:4 58..24 8	0.55	g40985 75	86	414	3.8e- 23	(U7973 5) riboso mal protei n S11 [Xanth omonas campes tris pv. campes tris]
164914	ATU026 854	ATL8C1 4772:9 31..44	nap				ATL8C1 4772:4 02..58	0.52	g42630 50	86	485	2.7e- 43	(AC005 142) putati ve noduli n [Arabi dopsis thalia nal]
164915	ATU026 855	ATL8S2 1628:4 03..1	nap						g28223 22	86	169	5.8e- 09	(AF016 485) ORF H0549

164916	ATU026 856	ATL8S9 822:56 4..36	nap										g45859 33	86		747	3.6e- 50	[Halob acteri um sp. NRC-1]
164917	ATU026 857	ATL8C1 0698:3 93..1	nap										g40068 63	86		145		(Z9970 7) putati ve protei n (parti al) [Arabi dopsis thalia na]
164918	ATU026 858	ATL8C3 3047:1 ..383	nap										g30969 44	86		83	3.4e- 08	(AL023 094) putati ve protei n [Arabi dopsis thalia na]
164919	ATU026 859	ATL8C8 179:14 72..1	nap										g41853 10	86		2059	4.7e- 181	(AF090 446) gag protei

164920	ATU026 860	ATL8C2 2375:3 074..5 217	nap										g43253 51	86	3453	0.0	n [Zea mays] (AF128 394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei n (GB:X5 7297) [Arabi dopsis thalia na]
164921	ATU026 861	ATL8C3 9439:3 20..58 1	nap										g42204 78	86	247	2.5e- 23	(AC006 069) hypoth etical protei n [Arabi dopsis thalia na]
164922	ATU026 862	ATL8C3 2054:3 23..12 79	nap										g32128 60	86	1063	3.3e- 106	(AC004 005) hypoth etical protei n [Arabi

164928	ATU026 868	ATL8C3 9934:1 577..2 396	nap										g22449 78	86	205	1.0e- 25	(Z9734 0) simila rity to splici ng factor SF3a 120K chain - human [Arabi dopsis thalia na]	007467) [Arabi dopsis thalia na]
164929	ATU026 869	ATL8C1 2027:1 103..4 63	nap										g29110 65	86	777	2.2e- 72	(AL021 960) putati ve protei n [Arabi dopsis thalia na]	(AL021 960) putati ve protei n [Arabi dopsis thalia na]
164930	ATU026 870	ATL8C4 1683:4 6..544	nap										g24967 35	86	537	2.0e- 47	HYPOTH ETICAL 21.1 KD PROTEI N Y4PG/Y	HYPOTH ETICAL 21.1 KD PROTEI N Y4PG/Y

164931	ATU026 871	ATL8C3 1081:1 582..1	nap										g44671 07	86	504	4.6e- 35	4SC [Rhizo bium sp. NGR234]
164932	ATU026 872	ATL8S1 1791:1 ..466	nap										g11976 67	86	86	0.094	(U4685 7) vitell ogenin [Anoli s pulche llus]
164933	ATU026 873	ATL8C3 4205:5 520..3 800	nap										g45860 66	86	1777	8.4e- 197	(AC006 194) putati ve pol polypr otein, 3', partia l [Arabi dopsis thalia na]
164934	ATU026 874	ATL8C4 2815:1 ..4106	nap										g43253 54	86	4494	0.0	(AF128 395) contai

164936	ATU026 876	ATL8C1 2303:1 ..996	nap							g44551 77	86	551	8.0e- 46	(AL035 521) putati ve protei n [Arabi dopsis thalia na]
164937	ATU026 877	ATL8C1 8728:1 5..732	nap							g33353 42	86	839	2.0e- 75	(AC004 512) Simila r to gb Y08 239 MADS domain transc riptio n factor (CRM3) from Cerato pteris richar dii. [Arabi dopsis thalia na]
164938	ATU026 878	ATL8C9 885:35 43..1	nap							g27087 43	86	3239	0.0	(AC003 952) putati ve Tal-1- like revers e

164939	ATU026 879	ATL8C1 7725:1 ..1607	nap					ATL8C1 7725:1 35..16 07	0.99	g45126 98	85	753	2.2e- 86	transcriptase [Arabidopsis thaliana] (AC006569) hypothetical protein [Arabidopsis thaliana]
164940	ATU026 880	ATL8C4 8736:6 47..1	nap					ATL8C4 8736:6 47..10	0.96	g17081 03	85	255	4.0e- 17	HISTONE H2B-1 [Chlamydomonas reinhardtii]
164941	ATU026 881	ATL8C4 4782:1 53..19 07	nap					ATL8C4 4782:1 77..18 18	0.95	g36500 36	85	676	2.1e- 89	(AC005396) putative transposase [Arabidopsis thaliana]
164942	ATU026 882	ATL8C1 6485:8 53..1	nap					ATL8C1 6485:7 70..40 9	0.95	g47739 07	85	140	5.3e- 11	(AF074021) hypothetical protein

164943	ATU026 883	ATL8C1 2546:3 12..21 90	nap						0.94		g39414 80	85	579	7.6e- 37	n [Arabi dopsis thalia na]
164944	ATU026 884	ATL8C3 3293:1 889..1	nap						0.93		g31532 37	85	363	1.6e- 40	(AF047 852) termin al earl [Zea mays]
164945	ATU026 885	ATL8S4 526:48 0..1	nap						0.93		g32983 55	85	542	2.9e- 48	(AB010 689) AhpC [Pseud omonas putida]
164946	ATU026 886	ATL8C1 2135:2 784..1 844	nap						0.92		g33778 43	85	908	1.9e- 93	(AF076 274) contai ns simila rity to rat p47 protei

164947	ATU026 887	ATL8C2 6273:1 435..1	nap					ATL8C2 6273:1 435..1 7	0.91	g32826 74	85	420	1.3e- 42	n (GB:AB 002086) [Arabi dopsis thalia na]
164948	ATU026 888	ATL8C3 1069:3 06..15 19	nap					ATL8C3 1069:4 65..15 08	0.91	g22449 05	85	1859	9.2e- 177	(Z9733 9) indole -3- acetat e beta- glucos yltran sferas e [Arabi dopsis thalia na]
164949	ATU026 889	ATL8C2 5084:1 640..6	nap					ATL8C2 5084:1 595..6	0.91	g28326 78	85	484	3.0e- 53	(AL021 712) putati

164950	ATU026 890	9	ATL8C1 0850:1 2..692	nap					ATL8C1 0850:1 2..592	0.90		g30804 39	85	162	2.9e- 09	ve protei n [Arabi dopsis thalia na] (AL022 605) putati ve protei n [Arabi dopsis thalia na]
164951	ATU026 891		ATL8C4 6817:1 597..3 7	nap					ATL8C4 6817:1 580..7 3	0.85		g22447 52	85	793	1.8e- 88	(Z9733 5) hypoth etical protei n [Arabi dopsis thalia na]
164952	ATU026 892		ATL8C4 8115:1 299..2 291	nap					ATL8C4 8115:1 989..1 886	0.83		g47339 60	85	1040	2.7e- 98	(AC007 294) putati ve zinc- finger protei n [Arabi dopsis thalia na]
164953	ATU026		ATL8C9	nap					ATL8C9	0.83		g28275	85	286	7.0e-	(AL021

164954	893	400:45 25..73 11					400:51 15..73 11	0.83	g45862 47	85	342	4.2e- 39	14	633) predic ted protei n [Arabi dopsis thalia na]
	ATU026 894	ATL8C2 0495:3 74..14 74	nap				ATL8C2 0495:8 11..13 69	0.83	g45862 47	85	342	4.2e- 39		(AL049 640) putati ve protei n [Arabi dopsis thalia na]
164955	ATU026 895	ATL8C4 2000:1 356..4 453	nap				ATL8C4 2000:1 660..4 068	0.82	g40637 59	85	2465	1.3e- 194		(AC005 561) hypoth etical protei n [Arabi dopsis thalia na]
164956	ATU026 896	ATL8C9 105:18 78..41 9	nap				ATL8C9 105:17 42..41 9	0.81	g22448 60	85	684			(Z9733 7) cucumi sin [Arabi dopsis thalia na]
164957	ATU026 897	ATL8C3 3417:1 423..1	nap				ATL8C3 3417:1 423..1	0.81	g24438 75	85	1445	3.1e- 145		(AC002 294) amino

164958	ATU026 898	ATL8C3 4503:1 ..1681	nap						0		ATL8C3 4503:8 1..123 3	0.76	g42637 02	85	920	4.0e- 74	(AC006 223) hypoth etical protei n [Arabi dopsis thalia na]
164959	ATU026 899	ATL8C1 7046:1 ..5188	nap								ATL8C1 7046:3 91..36 61	0.76	g47340 13	85	1808	1.1e- 186	(AC007 112) putati ve TNP1 of the Taml transp oson [Arabi dopsis thalia na]
164960	ATU026 900	ATL8C8 265:1. :2127	nap								ATL8C8 265:84 0..192 5	0.75	g48369 29	85	1506	1.1e- 124	(AC006 085) Hypoth etical protei n [Arabi dopsis thalia na]

164961	ATU026 901	ATL8C1 0439:3 98..19 33	nap				ATL8C1 0439:3 98..17 51	0.74	g36458 98	85	2345	(U6840 8) in- frame stop codon; possibly a post- transp- osition n mutati on [Zea mays]
164962	ATU026 902	ATL8C1 3921:2 3..742	nap				ATL8C1 3921:1 34..28 3	0.73	g31282 34	85	640	1.3e- 42 (AC004 077) hypoth etical protei n [Arabi dopsis thalia na]
164963	ATU026 903	ATL8C2 4288:1 ..2924	nap				ATL8C2 4288:6 5..290 1	0.71	g35488 04	85	1134	6.2e- 96 (AC005 313) unknow n protei n [Arabi dopsis thalia na]
164964	ATU026 904	ATL8S1 9823:1 ..416	nap				ATL8S1 9823:3 5..414	0.70	g11698 84	85	171	5.2e- 14 GLYCIN E CLEAVA GE SYSTEM

164965	ATU026 905	ATL8C4 5591:8 960..3 503	nap				ATL8C4 5591:4 763..3 503	0.70	g42638 30	85	1700	4.3e- 135	H PROTEI N PRECUR SOR [Flave ria triner via]
164966	ATU026 906	ATL8C2 351:10 38..1	nap				ATL8C2 351:10 38..12 7	0.70	g45126 97	85	541	2.6e- 50	(AC006 569) unknow n protei n [Arabi dopsis thalia na]
164967	ATU026 907	ATL8C3 0601:3 800..2	nap				ATL8C3 0601:3 308..9 25	0.69	g10874 , g23155 79	85, 70	439, 334	7.2e- 38, 2.0e- 29	(X0297 4) pot. w(+) polype ptide [Droso phila melano gaster];

164969	ATU026 909	ATL8C1 2378:1 130..7 8	nap					ATL8C1 2378:9 28..28 5	0.67	g47340 01	85	510	6.3e- 58	(AC007 187) hypoth etical protei n [Arabi dopsis thalia na]
164970	ATU026 910	ATL8C1 2810:6 10..62 46	nap					ATL8C1 2810:6 10..62 46	0.65	g33553 08, g33353 52	85, 50	813, 503	8.5e- 94, 1.1e- 55	(AJ009 695) wall- associ ated kinase 4 [Arabi dopsis thalia na]; (AC004 512) Contai ns simila rity to serine /threo nine kinase homolo

164971	ATU026 911	ATL8C3 4663:1 ..1823	nap					ATL8C3 4663:4 4..182 3	0.64	g10013 55	85	394	1.2e- 34	(D6400 6) auxin- induce d protei n [Synec hocyst is sp.]	g PRO25 gb L04 999 from A. thalia na. EST gb Z17 531 comes from this gene. [Arabi dopsis thalia na]
164972	ATU026 912	ATL8S2 7825:1 ..369	nap					ATL8S2 7825:2 07..35 3	0.62	g33342 88	85	158	1.9e- 12	PHENYL ACETIC ACID DEGRAD ATION PROTEI N PAAL [Esche richia coli]	g PRO25 gb L04 999 from A. thalia na. EST gb Z17 531 comes from this gene. [Arabi dopsis thalia na]

164973	ATU026 913	ATL8C3 6303:8 4..176 9	nap			ATL8C3 6303:8 4..172 5	0.59	g36881 76	85	463	5.0e- 54	(AL031 804) putati ve protei n [Arabi dopsis thalia na]
164974	ATU026 914	ATL8C2 5874:6 39..8	nap			ATL8C2 5874:6 39..47	0.58	g12729 7	85	98	1.4e- 07	MPV17 PROTEI N [Mus muscul us]
164975	ATU026 915	ATL8C8 252:30 0..951	nap			ATL8C8 252:68 9..868	0.57	g42637 69	85	773	1.7e- 46	(AC006 218) hypoth etical protei n [Arabi dopsis thalia na]
164976	ATU026 916	ATL8S1 5097:5 62..1	nap			ATL8S1 5097:3 32..85	0.57	g24966 70	85	640	1.5e- 53	HYPOTH ETICAL 25.1 KD PROTEI N Y4JL [Rhizo bium sp. NGR234]
164977	ATU026 917	ATL8C2 2317:1 ..764	nap			ATL8C2 2317:5 46..76	0.55	g33373 63	85	617	5.2e- 60	(AC004 481) putati

164978	ATU026 918	ATL8C3 7955:1 278..1	nap				4	0.54	g45811 43	85	575	9.3e- 63	ve zinc- finger protei n [Arabi dopsis thalia na]
164979	ATU026 919	ATL8C3 348:1. .868	nap				ATL8C3 7955:1 263..5 1	0.52	g45861 10	85	1298	1.2e- 79	(AC006 919) hypoth etical protei n [Arabi dopsis thalia na]
164980	ATU026 920	ATL8C1 4401:1 ..1974	nap				ATL8C1 4401:5 12..10 15	0.49	g30470 66	85	442	2.5e- 47	(AL049 638) putati ve DNA- bindin g protei n [Arabi dopsis thalia na]
													(AF058 825) contai ns simila rity to retrov

164981	ATU026 921	ATL8S1 226:1. .368	nap					ATL8S1 226:12 8..43	0.49	g33778 46	85	262	4.9e- 22	(AF076 274) No defini tion line found [Arabi dopsis thalia na]
164982	ATU026 922	ATL8C8 264:1. .1121	nap					ATL8C8 264:10 65..11 21	0.49	g17070 16	85	242	7.6e- 20	(U7872 1) cadmiu m- induce d protei n isolog [Arabi dopsis thalia na]
164983	ATU026 923	ATL8S2 2623:5 78..1	nap					ATL8S2 2623:4 77..30	0.48	g32942 37	85	219	2.2e- 18	(AL031 031) two- compon ent regula tor

164984	ATU026 924	ATL8C1 2250:4 23..1	nap					ATL8C1 2250:3 86..17	0.48		g32490 87	85	479	1.8e- 45	[Strep tomyces coelicolor] (AC004 473) Contains similarity to TMV resistance protein N homolog gb 224 5048 from A. thaliana chromosome 4 contig gb 297 342. [Arabidopsis thaliana]
164985	ATU026 925	ATL8C4 6739:1 ..3979	nap					ATL8C4 6739:1 426..3 884	0.47		g42622 10, g40068 21	85, 43	1691, 373	5.3e- 155, 3.2e- 16	(AC006 161) , similarity to leucine zipper

164986	ATU026 926	ATL8C3 3354:1 473..5 12	nap						ATL8C3 3354:1 072..6 97	0.46				g40564 42	85	797	1.8e- 75	transcription factor [Arabidopsis thaliana]; (AC005970) hypothetical protein [Arabidopsis thaliana]
164987	ATU026 927	ATL8C3 7824:1 ..4381	nap						ATL8C3 7824:9 8..414	0.45				g44328 66	85	2817	2.9e- 297	(AC006300) putative

164988	ATU026 928	ATL8C3 1961:6 ..994	nap					7		0.45	g13635 28	85	1491	9.0e- 137	gag protei n - maize [Zea mays]	ve revers e transc riptas e [Arabi dopsis thalia na]
164989	ATU026 929	ATL8C2 1341:3 227..1	nap					ATL8C2 1341:3 227..2 3		0.45	g43887 19	85	1960	2.9e- 128	(AC006 413) putati ve myosin -like protei n [Arabi dopsis thalia na]	
164990	ATU026 930	ATL8S4 781:1. .496	nap					ATL8S4 781:89 ..487		0.44	g33188 53	85	573	2.3e- 53	Chain A, The Struct ure Of Clpp At 2.3 Angstr om Resolu tion Sugges ts A	

164991	ATU026 931	ATL8C1 4494:4 063..1	nap						0.43	g45220 05	85	2279	3.7e- 242	(AC007 069) putati ve revers e transc riptas e [Arabi dopsis thalia na]	Model For Atp- Depend ent Proteo lysis []
164992	ATU026 932	ATL8C4 4124:3 894..1	nap						0.43	g43253 54	85	1670	3.4e- 147	(AF128 395) contai ns simila rity to retrov irus- relate d polypr oteins and to CCHC zinc finger protei n	

164993	ATU026 933	ATL8C2 486:11 11..1	nap						0.43	g48357 95	85	230	1.3e- 29	(Pfam: PF0009 8, Score= 16.3, E=0.05 1, E= 1) [Arabi dopsis thalia na]
164994	ATU026 934	ATL8S2 4026:3 46..1	nap						0.41	g13271 4	85	214	5.1e- 14	CHLORO PLAST 50S RIBOSO MAL PROTEI N L16 (RIBOS OMAL PROTEI N CS- L24) [Spina cia olerac ea]
164995	ATU026 935	ATL8C1 2153:3 77..17 26	nap						0.41	g22451 06	85	1013	1.8e- 82	(Z9734 3) thioes terase

164998 164999 165000 165001

164998	ATU026 938	ATL8C1 1348:1 ..653	nap							g47339 99	85	110	4.0e- 10	nal (AC007 187) hypoth etical protei n [Arabi dopsis thalia nal]
164999	ATU026 939	ATL8S2 3006:5 48..1	nap							g31842 87	85	560	8.2e- 44	(AC004 136) revers e- transc riptas e-like protei n [Arabi dopsis thalia nal]
165000	ATU026 940	ATL8C6 44:134 9..1	nap							g38926 99	85	166	1.0e- 28	(AL033 545) hypoth etical protei n (fragm ent) [Arabi dopsis thalia nal]
165001	ATU026 941	ATL8C1 4399:5 72..10 8	nap							g42622 43	85	614	8.4e- 54	(AC006 200) hypoth etical

165009	ATU026 949	ATL8C3 3826:8 1..144 1	nap							g44903 39	85	164	4.3e- 22	na] (AL035 656) putati ve protei n [Arabi dopsis thalia na]
165010	ATU026 950	ATL8S1 7687:2 22..1	nap							g30435 36	85	290	1.5e- 26	(AB000 708) SAUR [Rapha nus sativu s]
165011	ATU026 951	ATL8C4 5296:1 591..1	nap							g40068 23	85	264	8.8e- 13	(AC005 970) hypoth etical protei n [Arabi dopsis thalia na]
165012	ATU026 952	ATL8S1 6930:5 69..24 6	nap							g33778 46	85	321		(AF076 274) No defini tion line found [Arabi dopsis thalia na]
165013	ATU026	ATL8C3	nap							g45824	85	411	1.7e-	(AC007

	953	1049:1 570..7 20									55					41	071) putati ve recept or protei n kinase [Arabi dopsis thalia na]
165014	ATU026 954	ATL8C2 8456:1 ..384	nap								g44552 11	85	385	9.0e- 34	(AL035 440) STIG1 like protei n [Arabi dopsis thalia na]		
165015	ATU026 955	ATL8C2 2868:2 322..2 88	nap								g35401 92	85	263	2.1e- 28	(AC004 122) Hypoth etical protei n [Arabi dopsis thalia na]		
165016	ATU026 956	ATL8C3 0940:1 ..1461	nap								g43888 19	85	2094	3.2e- 192	(AC006 528) putati ve zinc- finger protei n		

165017	ATU026 957	ATL8C1 8465:9 72..12 44	nap						ATL8C1 8465:9 72..12 22	0.99	g44067 72	84	116	2.2e- 12	(AC006 836) putati ve nitri lase- associ ated protei n [Arabi dopsis thalia na]
165018	ATU026 958	ATL8S1 5029:4 81..1	nap						ATL8S1 5029:4 16..21	0.97	g31146 56	84	178	1.8e- 16	(AF060 871) putati ve site specif ic recomb inase [Rhodo coccus rhodoc hrous]
165019	ATU026 959	ATL8C2 6017:1 ..1503	nap						ATL8C2 6017:5 0..150 3	0.97	g22889 98	84	990	6.3e- 105	(AC002 335) peroxi dase isolat [Arabi dopsis thalia na]

165020	ATU026 960	ATL8C1 3163:3 420..1	nap			ATL8C1 3163:3 347..2 9	0.95	g11706 19	84	2282	3.7e- 180	KINESI N-LIKE PROTEI N A [Arabi dopsis thalia na]
165021	ATU026 961	ATL8C3 7020:8 66..1	nap			ATL8C3 7020:7 99..19	0.95	g48357 90	84	116		(AC007 296) F25C20 .16 [Arabi dopsis thalia na]
165022	ATU026 962	ATL8C4 1980:2 860..5 043	nap			ATL8C4 1980:2 860..5 012	0.94	g33778 17	84	784	1.7e- 79	(AF076 275) contai ns simila rity to C3HC4- type zinc finger s (Pfam: zf- C3HC4. hmm, score: 29.48) [Arabi dopsis thalia na]
165023	ATU026 963	ATL8C5 832:23	nap			ATL8C5 832:17	0.93	g48952 41	84	868		(AC007 659)

165024	ATU026 964	90..10 32	nap				53..10 36	0.93	g41015 64	84	312	4.4e- 25	(AF004 556) IFA- bindin g protei n [Arabi dopsis thalia nal]
165025	ATU026 965	ATL8C2 7047:5 43..44 17	nap				ATL8C4 2450:6 02..28 79	0.92	g34618 41	84	1654	1.3e- 143	(AC005 315) putati ve recept or protei n kinase [Arabi dopsis thalia nal]
165026	ATU026 966	ATL8C3 5159:5 88..1	nap				ATL8C3 5159:4 04..24	0.91	g32491 06	84	203	1.4e- 18	(AC003 114) T12M4. 16 [Arabi dopsis thalia nal]

165027	ATU026 967	ATL8S1 5011:6 4..515	nap				ATL8S1 5011:7 6..346	0.90	g17110 68	84	217	2.8e- 18	(U7883 9) phytoc hrome E [Carmi chaeli a sp. 'lavin 6201']
165028	ATU026 968	ATL8C1 5946:1 ..1915	nap				ATL8C1 5946:8 1..190 3	0.89	g27393 66	84	348	9.2e- 13	(AC002 505) SF16 like protei n [Arabi dopsis thalia na]
165029	ATU026 969	ATL8S1 4049:4 6..594	nap				ATL8S1 4049:4 6..579	0.88	g46317	84	308	3.8e- 23	(X6910 5) ORF1 [Sinor hizobi um mellilo ti]
165030	ATU026 970	ATL8C5 902:71 ..819	nap				ATL8C5 902:71 ..812	0.86	g45859 24	84	733		(AC007 211) hypoth etical protei n [Arabi dopsis thalia na]
165031	ATU026 971	ATL8C3 6550:1	nap				ATL8C3 6550:1	0.85	g11700 94	84	404	2.2e- 53	GLUTAT HIONE

165032	ATU026 972	ATL8S2 3738:1 71..44 5	nap							70..63 6										S- TRANSE RASE (CLASS -PHI) (25 KD AUXIN- BINDIN G PROTEI N) [Hyosc yamus muticu s]
																				(AF011 544) YecD [Bacil lus subtil is]
165033	ATU026 973	ATL8C2 28:163 2..565 2	nap																	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi
																				2.0e- 06
																				114
																				84
																				g24655 65
																				0.84
																				ATL8S2 3738:1 71..40 8
																				0.81, 0.81
																				ATL8C2 28:186 6..333 4, ATL8C2 28:376 8..565 2
																				84
																				g33193 60
																				3.2e- 273
																				3042

165034	ATU026 974	ATL8C4 9279:3 455..1 578	nap				ATL8C4 9279:3 102..1 578	0.81	g45393 51	84	876	8.5e- 87	dopsis thalia na] (AL035 539) putati ve protei n [Arabi dopsis thalia na]
165035	ATU026 975	ATL8C4 4417:9 43..1	nap				ATL8C4 4417:9 43..25 4	0.81	g17070 19	84	937	5.5e- 81	(U7872 1) hypoth etical protei n [Arabi dopsis thalia na]
165036	ATU026 976	ATL8C3 4968:1 ..1085	nap				ATL8C3 4968:8 4..105 0	0.80	g33353 44	84	929	3.2e- 72	(AC004 512) Simila r to serpin gene homolo g gb 249 890 from A. thalia na. [Arabi dopsis thalia

165040	ATU026 980	ATL8C3 0588:1 742..1	nap						0.76	g34618 49	84	841	4.0e- 65	(AC005 315) putati ve cytoch rome P450 [Arabi dopsis thalia na]	Rv1503 c [Mycob acteri um tuberc ulosis]
165041	ATU026 981	ATL8C1 0932:8 78..30 23	nap						0.76	g18175 44	84	1452	2.0e- 142	(D8302 5) prolin e oxidas e precur sor [Arabi dopsis thalia na]	
165042	ATU026 982	ATL8C3 7499:2 87..22 67	nap						0.75	g28275 28	84	617		(AL021 633) predic ted protei n [Arabi dopsis thalia na]	

165045	ATU026 985	ATL8C1 3798:1 806..7 02	nap				ATL8C1 3798:1 534..7 02	0.63	g45859 67	84	853	7.4e- 71	thalia na] (AC005 287) Hypoth etical protei n [Arabi dopsis thalia na]
165046	ATU026 986	ATL8C1 9895:8 27..17 16	nap				ATL8C1 9895:8 27..16 47	0.61	g28275 43	84	690	1.2e- 70	(AL021 635) predic ted protei n [Arabi dopsis thalia na]
165047	ATU026 987	ATL8C1 4428:1 ..4416	nap				ATL8C1 4428:2 01..44 16	0.61	g36458 99	84	4056	0.0	(U6840 8) 5' end not determ ined experi mental ly [Zea mays]
165048	ATU026 988	ATL8C1 0484:2 718..1	nap				ATL8C1 0484:6 60..28 , ATL8C1 0484:2 498..1	0.57, 0.84	g46894 52, g46462 26, g32427 11, g40380	84, 49, 49, 32	738, 490, 463, 194	(AC006 267) putati ve transp oson protei	

[illegible]

165050	ATU026 990	ATL8C4 0703:1 88..16 94	nap					ATL8C4 0703:1 88..15 68	0.53		g36458 98	84	2267	1.9e- 201	lactur onase [Arabi dopsis thalia nal] (U6840 8) in- frame stop codon; possib ly a post- transp ositio n mutati on [Zea mays]
165051	ATU026 991	ATL8C4 7669:1 505..8 0	nap					ATL8C4 7669:1 416..8 0	0.51		g40289 70	84	685	8.4e- 76	(AF060 248) pollen less3 [Arabi dopsis thalia nal]
165052	ATU026 992	ATL8C4 5299:1 77..77 3	nap					ATL8C4 5299:1 77..77 3	0.49		g41057 94	84	219	5.3e- 27	(AF049 928) PGP224 [Petun ia x hybrid al]
165053	ATU026 993	ATL8C3 6069:2 393..6 89	nap					ATL8C3 6069:1 902..6 89	0.48		g44328 08	84	1730	2.0e- 179	(AC006 570) hypoht etical

165054	ATU026 994	ATL8S2 4869:1 ..423	nap					ATL8S2 4869:1 21..42 3	0.47		g28268 77	84	370	2.2e- 33	(Y1631 1) Jag- like protei n [Strep tomyce s coelic olor]
165055	ATU026 995	ATL8C2 5641:1 ..417	nap					ATL8C2 5641:1 03..29 4	0.47		g44572 21	84	142	1.5e- 11	(AF127 797) putati ve bZIP DNA- bindin g protei n [Capsi cum chinen se]
165056	ATU026 996	ATL8C2 778:47 89..41 26	nap					ATL8C2 778:46 86..41 26	0.47		g46783 74	84	923	4.6e- 57	(AL049 656) myb- like protei n [Arabi dopsis thalia]

165057	ATU026 997	ATL8C2 1783:2 462..1	nap				ATL8C2 1783:1 146..1 01	0.46	g47739 20, g47739 08, g47739 12	84, 67, 31	2601, 1997, 134	4.0e- 237, 2.4e- 170, 2.2e- 08	na] (AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]; (AF147 259) No defini tion line found [Arabi dopsis thalia na]; (AF147 259) No defini tion line found [Arabi dopsis thalia na] (AF064 775) early nodule - specif
165058	ATU026 998	ATL8C2 7686:1 313..1	nap				ATL8C2 7686:1 298..7 0	0.45	g33282 40	84	711		(AF064 775) early nodule - specif

165059	ATU026 999	ATL8C3 1893:4 263..1	nap					ATL8C3 1893:4 263..4 17	0.44	g47738 81	84	3991	0.0	ic protei n [Medic ago trunca tula] (AF076 243) putati ve transp oson protei n [Arabi dopsis thalia na]
165060	ATU027 000	ATL8C2 7951:2 48..71 1	nap					ATL8C2 7951:2 68..63 9	0.43	g28326 47	84	439		(AL021 710) hypoth etical protei n [Arabi dopsis thalia na]
165061	ATU027 001	ATL8C6 81:118 8..320	nap					ATL8C6 81:110 3..395	0.43	g45080 79	84	1054	2.7e- 93	(AC005 882) 66284 [Arabi dopsis thalia na]
165062	ATU027 002	ATL8C3 2905:1 ..2173	nap					ATL8C3 2905:1 22..21 73	0.43	g36953 97	84	1605	3.8e- 143	(AF096 372) No defini

[illegible]

165063	ATU027 003	ATL8C1 2600:8 54..1	nap							g46789 26	84	519	3.7e- 48	(AL049 711) hypoth etical protein [Arabi dopsis thalia na]
165064	ATU027 004	ATL8C4 0198:1 ..538	nap							g40380 66	84	322	3.4e- 10	(AC005 897) hypoth etical protein [Arabi dopsis thalia na]
165065	ATU027 005	ATL8C2 4620:1 ..1062	nap							g12840 5	84	466	1.6e- 40	NODULI N 21 (N-21) [Glyci ne max]
165066	ATU027 006	ATL8C1 2337:5 72..15 41	nap							g12840 5	84	439	7.2e- 40	NODULI N 21 (N-21) [Glyci ne max]
165067	ATU027	ATL8C4	nap							g28275	84	487	3.8e-	(AL021

007	6201:8 87..13 49								31			31	hypothetical protein [Arabidopsis thaliana]
165068	ATU027 008	ATL8C4 2508:1 ..647	nap						g47739 12	84	656	4.7e-60	(AF147259) No definition line found [Arabidopsis thaliana]
165069	ATU027 009	ATL8C4 9731:3 51..57 9	nap						g19073 31	84	113	7.1e-08	(U87316) orf1; putative [Methylobacterium extorquens]
165070	ATU027 010	ATL8C5 423:1. .909	nap						g45389 69	84	501	2.8e-53	(AL049488) putative protein [Arabidopsis thaliana]

165071	ATU027 011	ATL8S1 2123:5 29..1	nap							g32932 39	84	527	1.7e- 39	(U9641 3) putati ve IS3- like transp osase [Agrob acteri um tumefa ciens]
165072	ATU027 012	ATL8C3 2931:3 40..21 45	nap							g45859 31	84	1058	9.0e- 119	(AC007 211) hypoth etical protei n [Arabi dopsis thalia na]
165073	ATU027 013	ATL8C4 1993:1 ..560	nap							g45876 08	84	358	1.0e- 30	(AC006 951) putati ve polyga lactur onase [Arabi dopsis thalia na]
165074	ATU027 014	ATL8C3 4035:3 23..99 1	nap							g45122 42	84	473	1.2e- 47	(AB014 750) polypr oteins [Nicot iana]

165075	ATU027 015	ATL8C1 5220:1 ..527	nap							940380 66	84	450	4.2e- 27	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
165076	ATU027 016	ATL8C8 10:146 1..462	nap							930804 39	84	129	6.2e- 14	(AL022 605) putati ve protei n [Arabi dopsis thalia na]
165077	ATU027 017	ATL8C3 1762:5 46..35 9	nap							945811 44	84	307	9.8e- 27	(AC006 919) hypoth etical protei n [Arabi dopsis thalia na]
165078	ATU027 018	ATL8S1 747:1. .527	nap							945899 59	84	163	3.2e- 19	(AC007 169) hypoth etical protei n [Arabi dopsis thalia na]

165082	ATU027 022	ATL8C1 1216:1 443..8 08	nap						ATL8C1 1216:1 370..1 214	0.99	g21941 34	83	69	0.0004 6	Athila retro element ORF1 protein [Arabi dopsis thalia na]; (AF147 259) No defini tion line found [Arabi dopsis thalia na]
165083	ATU027 023	ATL8S5 116:33 3..1	nap						ATL8S5 116:32 1..13	0.95	g31278 54	83	124	7.0e- 10	(AL023 496) hypoth etical protein [Strep tomyce

165084	ATU027 024	ATL8C2 4128:4 87..1	nap							ATL8C2 4128:4 45..28 6	0.95		g36872 48	83	286	3.4e- 28	s coelic olor] (AC005 169) hypoth etical protei n [Arabi dopsis thalia na]
165085	ATU027 025	ATL8C1 1237:1 649..4 84	nap							ATL8C1 1237:1 536..5 16	0.94		g23985 25	83	579	2.7e- 66	(Y1372 2) Transc riptio n factor [Arabi dopsis thalia na]
165086	ATU027 026	ATL8C9 750:1. .1693	nap							ATL8C9 750:62 ..1673	0.93		g45080 68	83	126	2.3e- 06	(AC005 882) 3063 [Arabi dopsis thalia na]
165087	ATU027 027	ATL8C6 765:63 4..1	nap							ATL8C6 765:61 3..13	0.93		g24629 36	83	711	6.5e- 62	(Y1232 1) open readin g frame 2 [Brass ica olerac

165088	ATU027 028	ATL8C2 4179:1 952..3 59	nap					ATL8C2 4179:1 591..3 59	0.92	g38941 89	83	722	2.2e- 75	(AC005 662) hypoth etical protei n [Arabi dopsis thalia na]
165089	ATU027 029	ATL8C4 0210:1 102..1	nap					ATL8C4 0210:1 102..2 62	0.91	g36953 97	83	1454	7.0e- 101	(AF096 372) No defini tion line found [Arabi dopsis thalia na]
165090	ATU027 030	ATL8C4 4452:1 ..886	nap					ATL8C4 4452:5 4..818	0.89	g34027 12	83	574	1.0e- 38	(AC004 261) hypoth etical protei n [Arabi dopsis thalia na]
165091	ATU027 031	ATL8C3 4201:8 8..155 0	nap					ATL8C3 4201:1 13..15 35	0.89	g39803 78	83	1042	8.7e- 116	(AC004 561) putati ve RNA bindin g protei n

165092	ATU027 032	ATL8C2 6444:2 06..93 7	nap					ATL8C2 6444:2 74..75 7	0.87	g23410 39	83	447	6.8e- 43	[Arabi dopsis thalia na] (AC000 104) Simila r to Nicoti ana lesion - induci ng ORF (gb U6 6269). [Arabi dopsis thalia na]
165093	ATU027 033	ATL8C7 882:67 ..1044	nap					ATL8C7 882:67 ..988	0.85	g43773 15	83	169	2.4e- 18	(AE001 679) ytgB- like predic ted rRNA methyl ase [Chlam ydia pneumo niae]
165094	ATU027 034	ATL8C3 1127:2 664..1 0	nap					ATL8C3 1127:2 590..1 0	0.85	g13467 04	83	410	2.8e- 40	POLYGA LACTUR ONASE PRECUR SOR (PG) (PECTI

165095	ATU027 035	ATL8C2 7234:1 056..1	nap							ATL8C2 7234:7 43..18	0.84		g44328 16	83	1240	3.0e- 99	NASE) [Malus domest ical] (AC006 593) hypoth etical protei n [Arabi dopsis thalia nal]
165096	ATU027 036	ATL8C4 7559:2 230..1	nap							ATL8C4 7559:2 230..1 30	0.83		g32427 11	83	2544	8.0e- 213	(AC003 040) hypoth etical protei n [Arabi dopsis thalia nal]
165097	ATU027 037	ATL8C4 7498:2 237..8 5	nap							ATL8C4 7498:2 078..8 5	0.83		g25058 84	83	1512	4.3e- 166	(Y1277 6) hypoth etical protei n [Arabi dopsis thalia nal]
165098	ATU027 038	ATL8C1 3121:1 ..1479	nap							ATL8C1 3121:3 01..14 22	0.83		g31830 77	83	232	8.0e- 09	PROBAB IE 1,4- DIHYDR OXY-2- NAPHTH

165099	ATU027 039	ATL8C3 0127:1 ..4274	nap					ATL8C3 0127:6 5..386 9	0.81	g46461 95	83	3044	8.5e- 295	OATE OCTAPR ENYLTR ANSFER ASE (DHNA- OCTAPR ENYLTR ANSFER ASE) [Synec hocyst is sp.]
165100	ATU027 040	ATL8C2 6482:1 465..1	nap					ATL8C2 6482:1 417..8 9	0.77	g39351 58	83	910	1.2e- 79	(AC004 557) F17L21 .1 [Arabi dopsis thalia na]
165101	ATU027 041	ATL8S3 0952:4 91..47	nap					ATL8S3 0952:4 45..10 2	0.76	g26330 05	83	96	1.6e- 07	(Z9910 7) altern ate gene name: yeen, yfxC, yfxD;

165102	ATU027 042	ATL8C5 899:23 17..1	nap						ATL8C5 899:23 17..79 0	0.76	g24355 17	83	747			similar to hypothetical protein [Bacillus subtilis] (AF024504) contains similarity to peptidase family A1 [Arabidopsis thaliana]
165103	ATU027 043	ATL8C3 7164:1 ..1571	nap						ATL8C3 7164:1 97..15 71	0.75	g45811 58	83	268			(AC006919) putative DNA binding protein with homeobox domain [Arabidopsis thaliana]

165104	ATU027 044	ATL8C1 0988:8 95..1	nap				ATL8C1 0988:8 95..11 3	0.72	g28276 49	83	147	1.5e- 08	(AL021 637) putati ve protei n [Arabi dopsis thalia na]
165105	ATU027 045	ATL8C3 5369:1 ..2662	nap				ATL8C3 5369:1 399..2 662	0.70	g32985 43	83	752	1.1e- 50	(AC004 681) hypoth etical protei n [Arabi dopsis thalia na]
165106	ATU027 046	ATL8C4 3966:1 ..1218	nap				ATL8C4 3966:8 0..675	0.69	g34026 90	83	584		(AC004 697) hypoth etical protei n, 3' partia l [Arabi dopsis thalia na]
165107	ATU027 047	ATL8C4 4686:7 994..6 186	nap				ATL8C4 4686:7 889..6 502	0.69	g33778 35, g41274 17	83, 32	404, 393	4.4e- 39, 6.5e- 38	(AF075 598) contai ns simila rity to Arabid

165108	ATU027 048	ATL8C9 805:1. .1907	nap							ATL8C9 805:61 .1749	0.68	g28326 29	83	685	1.1e- 74	(AL021 711) 4- coumar ate- CoA ligase - like [Arabi dopsis thalia na]
165109	ATU027 049	ATL8C1 785:16	nap							ATL8C1 785:14	0.66	g32427 13	83	1066	3.2e- 167	(AC003 040)

165110	ATU027 050	15..20 8	nap				08..26 0	0.65	g30252 38	83	174	8.3e- 14	putati ve transp osase [Arabi dopsis thalia nal]
		ATL8S3 437:49 0..1					ATL8S3 437:49 0..198						HYPOTH ETICAL OXIDOR EDUCTA SE IN MEAA 3'REGI ON (ORFC) [Methy lobact erium extorq uens]
165111	ATU027 051	ATL8C1 0790:1 728..5 4	nap				ATL8C1 0790:5 67..18 2	0.64	g38941 76	83	108	5.2e- 10	(AC005 312) putati ve NAM (no apical merist em) protei n [Arabi dopsis thalia nal]
165112	ATU027 052	ATL8S8 492:23 5..1	nap				ATL8S8 492:98 ..45	0.63	g28800 53	83	158	8.4e- 12	(AC002 340) hypoth etical

165113	ATU027 053	ATL8C4 2534:7 77..12	nap					ATL8C4 2534:4 70..28 8	0.63		g46782 10	83	555	4.8e- 50	(AC007 134) hypoth etical protei n [Arabi dopsis thalia nal]
165114	ATU027 054	ATL8C1 1473:1 ..872	nap					ATL8C1 1473:4 97..84 7	0.61		g40975 28	83	224	1.0e- 20	(U6389 8) AppB protei n [Arabi dopsis thalia nal]
165115	ATU027 055	ATL8S2 6233:4 99..57	nap					ATL8S2 6233:4 09..25 0	0.60		g45859 30	83	361	4.3e- 35	(AC007 211) hypoth etical protei n [Arabi dopsis thalia nal]
165116	ATU027 056	ATL8C6 594:1. .342	nap					ATL8C6 594:11 5..327	0.60		g23985 31	83	142	3.0e- 09	(Y1372 6) Transc riptio n

165117	ATU027 057	ATL8C2 2864:4 589..1	nap					ATL8C2 2864:4 589..6 04	0.58	g25650 07	83	2912	9.8e- 284	factor [Arabi dopsis thalia nal] (AC002 983) predic ted transp oson protei n [Arabi dopsis thalia nal]
165118	ATU027 058	ATL8C5 191:50 75..23 44	nap					ATL8C5 191:49 04..23 44	0.57	g33778 30	83	1967	1.2e- 177	(AF075 598) contai ns simila rity to Aplysi a califo rnica interm ediate filame nt protei n A (GB:X6 0297) [Arabi dopsis thalia nal]

165119	ATU027 059	ATL8C3 0974:2 788..1 348	nap				ATL8C3 0974:2 503..1 348	0.55	g40068 20	83	1847	7.5e- 194	(AC005 970) putati ve serine carbox ypepti dase [Arabi dopsis thalia na]
165120	ATU027 060	ATL8C2 4357:1 ..3891	nap				ATL8C2 4357:1 50..38 91	0.53	g33193 60	83	3170	6.3e- 241	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
165121	ATU027 061	ATL8C1 89:663 8..374	nap				ATL8C1 89:651 2..446	0.51	g43097 63	83	4121		(AC006 217) putati ve retrot ranspo son

165122	ATU027 062	ATL8C4 3344:2 07..42 65	nap					ATL8C4 3344:2 07..41 92	0.48	g44552 03	83	839				polypr otein [Arabi dopsis thalia na]
165123	ATU027 063	ATL8C1 671:41 83..13 18	nap					ATL8C1 671:40 36..15 90	0.47	g33193 60	83	2553	2.7e- 283			(AL035 440) putati ve protei n [Arabi dopsis thalia na]
165124	ATU027 064	ATL8S2 5543:5 87..30	nap					ATL8S2 5543:4 96..48	0.47	g10017 61	83	471	2.3e- 43			(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
																(D6400 4) phosph

165125	ATU027 065	ATL8C3 4623:1 ..644	nap						0.46	g45726 67	83	369	1.9e- 37	(AC006 954) hypoth etical protei n [Arabi dopsis thalia na]	oribos yl formyl glycin amidin e syntha se [Synec hocyst is sp.]
165126	ATU027 066	ATL8S8 342:1. .436	nap						0.41	g39258 19	83	287	2.0e- 24	(AB020 211) unname d protei n produc t [Roseo bacter denitr ifican s]	(AB020 211) unname d protei n produc t [Roseo bacter denitr ifican s]
165127	ATU027 067	ATL8C3 8792:4 97..1	nap							g31842 87	83	151	0.0017	(AC004 136) revers e- transc	(AC004 136) revers e- transc

165128	ATU027 068	ATL8C2 4692:1 596..1	nap										g45859 33	83	154	1.2e- 14	(AC007 211) hypoth etical protei n [Arabi dopsis thalia na]
165129	ATU027 069	ATL8C1 0174:2 817..5 19	nap										g45811 64	83	1470		(AC006 220) putati ve polypr oteins [Arabi dopsis thalia na]
165130	ATU027 070	ATL8C1 9893:1 ..959	nap										g28275 43	83	669	1.2e- 63	(AL021 635) predic ted protei n [Arabi dopsis thalia na]
165131	ATU027 071	ATL8C7 633:11	nap										g45858 81	83	737	3.0e- 82	(AC005 850)

165132	ATU027 072	ATL8C4 9438:4 291..2 368	nap									g47339 64	83	2235	3.1e- 227	Hypothetical protein [Arabidopsis thaliana]
165133	ATU027 073	ATL8C1 9372:1 545..1	nap									g45672 96	83	1853	6.5e- 150	(AC006918) putative Athila retroelement ORF1 protein [Arabidopsis thaliana]
165134	ATU027 074	ATL8S3 0599:1 ..299	nap									g77341 4	83	189	6.4e- 16	(U23751) beta galactosidase [Cloning

165148	ATU027 088	8..445	ATL8C2 2396:5 82..11 81	nap							g45444 46	83	389	2.5e- 35	(AC006 592) hypoth etical protei n [Arabi dopsis thalia na]
165149	ATU027 089	ATL8S9 160:1. .591	nap					ATL8S9 160:79 ..294	1.00	g91210	82	142	0.9998	prolin e-rich protei n MP3 - mouse (fragm ent) []	
165150	ATU027 090	ATL8C1 0766:6 958..1 254	nap							g28282 80	83	1358	8.7e- 154	(AL021 687) putati ve protei n [Arabi dopsis thalia na]	
165151	ATU027 091	ATL8S1 4427:5 44..26	nap							g29504 11	83	297	6.9e- 23	(AL022 075) hypoth	

165152	ATU027 092	ATL8C4 6242:1 ..783	nap										g22449 60	83	692	3.5e- 94	(Z9734 0) simila rity to copia- like retrot ranspo son [Arabi dopsis thalia na]	etical protei n Rv3588 C [Mycob acteri um tuberc ulosis]
165153	ATU027 093	ATL8C1 5217:3 839..3 57	nap										g43097 67	83	2683	1.8e- 260	(AC006 217) putati ve Athila retroeo lement ORF1 protei n [Arabi dopsis thalia na]	
165154	ATU027	ATL8C3	nap										g31282	83	198	2.1e-	(AC004	

094	912:1. .463							15	23	077)			
165155	ATU027 095	ATL8C8 389:1. .957	nap					0.98	g39280 96	82	1532	7.6e- 151	(AC005 770) hypoth etical protei n [Arabi dopsis thalia na]
165156	ATU027 096	ATL8S1 1513:1 ..583	nap					0.97	g17365 03	82	588	1.0e- 56	(D9082 8) Hollid ay juncti on DNA helica se RuvB. [Esche richia coli]
165157	ATU027 097	ATL8C3 7961:1 ..928	nap					0.97	g43143 66	82	727	1.7e- 66	(AC006 340) hypoth etical protei n [Arabi dopsis thalia

165158	ATU027 098	ATL8C2 0873:1 ..945	nap				ATL8C2 0873:5 6..945	0.96	g39414 36	82	623	9.3e- 55	na] (AF062 872) putati ve transc riptio n factor [Arabi dopsis thalia na]
165159	ATU027 099	ATL8C4 3600:1 526..3 03	nap				ATL8C4 3600:1 526..6 10	0.94	g29613 53	82	1546		AL022 140) pectat e lyase like protei n [Arabi dopsis thalia na]
165160	ATU027 100	ATL8C2 9246:1 ..947	nap				ATL8C2 9246:1 48..94 7	0.93	g38057 63	82	1505	8.3e- 140	(AC005 693) hypo thetical protei n [Arabi dopsis thalia na]
165161	ATU027 101	ATL8C2 6834:1 ..635	nap				ATL8C2 6834:6 5..575	0.91	g42204 82	82	542	2.0e- 56	(AC006 069) hypo thetical protei

165162	ATU027 102	ATL8C3 3166:2 2..275 6	nap					ATL8C3 3166:2 2..273 3	0.88	g45875 16	82	2031	3.1e- 205	n [Arabi dopsis thalia na] (AC007 060) Strong simila rity to gb U80 583 protei nase TMP from Lycope rsicon escule ntum and is a member of the PF1000 82 subtil ase family . [Arabi dopsis thalia na]
165163	ATU027 103	ATL8C6 710:50 50..1	nap					ATL8C6 710:50 41..24 06	0.84	g43253 74	82	3842	0.0	(AF128 396) No defini tion

165164	ATU027 104	ATL8C5 445:45 6..624 8	nap						ATL8C5 445:45 6..621 4	0.83	g21911 95	82	2550	4.2e- 226	(AF007 271) contai ns simila rity to T. cruzi 3' end fragme nt (PID:9 161956) [Arabi dopsis thalia nal]
165165	ATU027 105	ATL8C1 1779:1 301..3 917	nap						ATL8C1 1779:1 301..3 604	0.82	g45196 71	82	251	1.3e- 11	(AB017 693) transf actor [Nicot iana tabacu m]
165166	ATU027 106	ATL8C2 332:1. .692	nap						ATL8C2 332:21 9..606	0.80	g42630 50	82	316	9.4e- 34	(AC005 142) putati ve noduli n [Arabi dopsis nal]

165167	ATU027 107	ATL8S1 4228:1 ..400	nap				ATL8S1 4228:9 2..382	0.79	g27915 88	82	117	1.3e- 09	thalia nal (AL021 287) hypoth etical protei n Rv2991 [Mycob acteri um tuberc ulosis]
165168	ATU027 108	ATL8C4 3403:1 902..1	nap				ATL8C4 3403:1 902..3 1	0.74	g47591 00	82	118		splici ng factor , argini ne/ser ine- rich 11 [Homo sapien s]
165169	ATU027 109	ATL8S1 7142:4 90..1	nap				ATL8S1 7142:4 81..14	0.73	g24940 28	82	169	3.1e- 14	PUTATI VE D- ALANIN E--D- ALANIN E LIGASE (D- ALANYL ALANIN E SYNTHE TASE)

165170	ATU027 110	ATL8C1 7008:1 ..2120	nap						ATL8C1 7008:5 0..821 , ATL8C1 7008:1 313..2 120	0.72, 0.51	g36953 95	82	2192	3.9e- 198	(AF096 372) contai ns simila rity to revers e transc riptas e (Pfam: PF0007 8 rvt, E=4.3e -08) [Arabi dopsis thalia na]	[Strep tococc us mutans]
165171	ATU027 111	ATL8C2 3935:1 ..967	nap						ATL8C2 3935:7 1..878	0.71	g42204 70	82	364	1.4e- 23	(AC006 069) hypo thetical protein [Arabi dopsis thalia na]	
165172	ATU027 112	ATL8C3 0518:1 ..1872	nap						ATL8C3 0518:1 7..187 2	0.70	g45388 96	82	1628	4.4e- 176	(AL049 482) putati ve	

165173	ATU027 113	ATL8C1 6352:3 07..23 03	nap					ATL8C1 6352:3 07..22 95	0.70	g41153 76	82	1209	1.3e- 120	protei n [Arabi dopsis thalia na]
165174	ATU027 114	ATL8C3 7555:7 45..1	nap					ATL8C3 7555:7 45..34	0.69	g42621 66	82	339	3.6e- 34	(AC005 275) hypoth etical protei n [Arabi dopsis thalia na]
165175	ATU027 115	ATL8C7 900:13 35..11 62	nap					ATL8C7 900:13 35..12 38	0.67	g28326 55	82	199	7.9e- 17	(AL021 710) hypoth etical protei n [Arabi dopsis thalia na]
165176	ATU027 116	ATL8C2 4902:9 13..1	nap					ATL8C2 4902:8 44..76	0.65	g44681 13	82	253	3.3e- 24	(Y1836 7) 3- alpha- hydrox

165177	ATU027 117	ATL8C8 825:16 90..12 0	nap					ATL8C8 825:16 42..23 1	0.64	g41917 91	82	665	5.0e- 77	(AC005 917) putati ve sf21 {Helia nthus annuus } protei n [Arabi dopsis thalia na]
165178	ATU027 118	ATL8S2 3281:5 52..1	nap					ATL8S2 3281:4 90..28 2	0.64	g28322 45	82	591	3.9e- 50	(AF031 569) hypoth etical protei n [Zea mays]
165179	ATU027 119	ATL8C1 0474:1 ..1611	nap					ATL8C1 0474:9 ..1244	0.63	g30470 66	82	2055		(AF058 825) contai ns simila

165180	ATU027 120	ATL8C2 7357:1 278..2 979	nap						ATL8C2 7357:1 278..2 826	0.63	g32506 75	82	1627			rity to retrov irus- relate d POL polyp roteins [Arabi dopsis thalia na]
165181	ATU027 121	ATL8C3 2426:5 599..3 631	nap						ATL8C3 2426:5 503..3 631	0.62	g41153 59	82	1946	3.7e- 204		(AL024 486) putati ve protei n [Arabi dopsis thalia na]
165182	ATU027 122	ATL8C3 0061:2 139..1	nap						ATL8C3 0061:1 988..4 0	0.61	g42635 22	82	956	2.6e- 104		(AC005 957) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]
																(AC004 044) hypoth etical

165183	ATU027 123	ATL8C3 6856:1 ..3130	nap					ATL8C3 6856:2 9..313 0	0.60			g30437 26	82	472	2.1e- 76	protein [Arabidopsis thaliana]
165184	ATU027 124	ATL8C2 3454:3 903..6 338	nap					ATL8C2 3454:3 903..6 180	0.59			g40380 56	82	3171	4.5e- 313	(AC005 897) putative transposon [Arabidopsis thaliana]
165185	ATU027 125	ATL8C4 0102:1 ..865	nap					ATL8C4 0102:6 6..838	0.59			g42001 22, g44553 09	82, 51	412, 80	2.3e- 36, 2.5e- 06	(AJ009 555) hypothetical protein [Arabidopsis thaliana]; (AL035 528) hypothetical protein

165189	ATU027 129	ATL8C2 876:14 53..27 0	nap				ATL8C2 876:47 4..276	0.55	g21296 36	82	673	7.8e- 71	[Arabi dopsis thalia nal; (AC006 217) putati ve retroe lement integr ase [Arabi dopsis thalia nal]
165190	ATU027 130	ATL8C2 3590:1 343..6 84	nap				ATL8C2 3590:1 286..6 84	0.53	g45803 88	82	233	8.5e- 10	(AC007 171) hypoth etical protei n [Arabi dopsis thalia nal]
165191	ATU027 131	ATL8C3 9451:1 ..475	nap				ATL8C3 9451:1 79..39 4	0.51	g38057 59	82	321	4.2e- 21	(AC005 693) hypoth etical

165194	ATU027 134	ATL8C1 6343:1 ..1677	nap				ATL8C1 6343:1 24..13 10	0.48	g41917 94	82	975	5.4e- 110	(AC005 917) putati ve zinc finger -like protei n [Arabi dopsis thalia nal]
165195	ATU027 135	ATL8S1 9401:5 59..1	nap				ATL8S1 9401:4 96..34	0.48	g17105 05, g11730 59	82, 40	245, 235	9.0e- 11, 7.7e- 21	50S RIBOSO MAL PROTEI N L18 [Vibri o proteo lyticu s]; 50S RIBOSO MAL PROTEI N L6 [Esche richia coli]
165196	ATU027 136	ATL8C2 3405:1 ..1139	nap				ATL8C2 3405:2 09..46 7	0.47	g44173 05	82	850	5.5e- 74	(AC006 446) hypoth etical protei n [Arabi dopsis thalia]

165197	ATU027 137	ATL8C2 4238:2 463..1 9	nap				ATL8C2 4238:2 413..1 55	0.47	933778 16	82	2870	7.0e- 260	na] (AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
165198	ATU027 138	ATL8C1 55:692 ..150	nap				ATL8C1 55:481 ..219	0.45	941057 94	82	142		(AF049 928) PGP224 [Petun ia x hybrid a]
165199	ATU027 139	ATL8S2 6893:5 70..1	nap				ATL8S2 6893:5 70..11 2	0.41	921819 95	82	108		(Z9607 2) hypo thetical protein Rv2704 [Mycob acteri um tuberc

165200	ATU027 140	ATL8C9 435:12 56..44 8	nap								g32978 17	82	157	1.5e- 13	(AL031 032) putati ve protei n [Arabi dopsis thalia na]	ulosi s
165201	ATU027 141	ATL8C4 0552:1 ..320	nap								g41153 55	82	85	8.7e- 06	(AC005 957) unknow n protei n [Arabi dopsis thalia na]	
165202	ATU027 142	ATL8C3 0878:2 625..1	nap								g36458 99	82	4175	0.0	(U6840 8) 5' end not determ ined experi mental ly [Zea mays]	
165203	ATU027 143	ATL8S2 7853:6 50..20 1	nap								g32288 4	82	180	0.0032	pollen - prefer ential protei n - trumpe	

165204	ATU027 144	ATL8C2 0799:1 ..2463	nap									g44681 04	82	3060	6.5e- 304	(AL022 223) hypoth etical protein [Arabi dopsis thalia na]	t lily [Liliu m longif lorum]
165205	ATU027 145	ATL8C2 6750:4 45..1	nap									g45586 83	82	237	1.7e- 22	(AC006 586) putati ve retrot ranspo son Ttol ORF1 protei n [Arabi dopsis thalia na]	(AC006 586) putati ve retrot ranspo son Ttol ORF1 protei n [Arabi dopsis thalia na]
165206	ATU027 146	ATL8C3 2520:3 24..1	nap									g34027 02	82	121	2.0e- 05	(AC004 261) unknow n protei n [Arabi dopsis thalia na]	(AC004 261) unknow n protei n [Arabi dopsis thalia na]

165207	ATU027 147	ATL8C4 2830:2 15..15 56	nap						g44903 39	82	244	4.9e- 34	(AL035 656) putati ve protei n [Arabi dopsis thalia na]
165208	ATU027 148	ATL8C8 676:19 39..34 13	nap						g36458 98	82	2263	4.1e- 194	(U6840 8) in- frame stop codon; possib ly a post- transp ositio n mutati on [Zea mays]
165209	ATU027 149	ATL8C4 9211:1 ..1426	nap						g33193 67	82	703	5.3e- 77	(AF077 409) No defini tion line found [Arabi dopsis thalia na]
165210	ATU027 150	ATL8C4 2362:1 544..1	nap						g17698 98	82	2315	6.8e- 200	(Y0801 0) lectin recept

165215	154	6529:1 ..565								13				82	1) mtrA [Mycob acteri um tuberc ulosis]
	ATU027 155	ATL8C2 8133:1 063..1	nap							g72950 6	0.96	81	337	1.3e- 32	NARING ENIN,2 - OXOGLU TARATE 3- DIOXYG ENASE (FLAVO NONE- 3- HYDROX YLASE) (FHT) [Matth iola incana]
165216	ATU027 156	ATL8C2 5688:1 175..4	nap							g45824 61	0.94	81	1878	8.0e- 158	(AC007 071) putati ve triacy lglyce rol lipase [Arabi dopsis thalia na]
165217	ATU027 157	ATL8C2 2290:1	nap							g29210 94	0.93	81	427	4.5e- 40	(AF018 174)

165218	ATU027 158	..1255	nap				39..12 11	0.87	g22136 04	81	609	7.7e- 65	thiore- doxin- f [Brass ica napus] (AC000 348) T7N9.2 4 [Arabi dopsis thalia na]
165219	ATU027 159	ATL8C5 527:64 3..1	nap				ATL8C5 527:37 6..44	0.87	g30753 99	81	322	1.1e- 29	(AC004 484) SF16- like protei n [Arabi dopsis thalia na]
165220	ATU027 160	ATL8C1 4864:6 83..23 07	nap				ATL8C1 4864:6 83..20 39	0.85	g58687 5	81	85	0.0004 5	HYPOTH ETICAL 29.2 KD PROTEI N IN METS- KSGA INTERG ENIC REGION [Bacil lus subtil is]
165221	ATU027	ATL8S3	nap				ATL8S3	0.80	g57544	81	274	8.2e-	(U1685

161	075:33 5..1						075:33 5..32	9				25	7) Derive d from E. coli thiore doxin gene; normal transl ation termin ation codon follow ing nucleo tide 3050 has been remove d [Cloni ng vector pTRXFU S]
165222	ATU027 162	ATL8C1 7685:4 748..2 746	nap				ATL8C1 7685:4 517..2 966	0.80	g47738 93	1953	2.4e- 193	(AF076 243) putati ve recept or- like protei n kinase [Arabi dopsis	

165223	ATU027 163	ATL8C2 1694:1 ..755	nap				ATL8C2 1694:2 57..75 5	0.80	g45586 87	81	776	2.1e- 66	thalia nal (AC006 586) hypoth etical protei n [Arabi dopsis thalia nal]
165224	ATU027 164	ATL8C2 9107:3 4..364 6	nap				ATL8C2 9107:3 4..357 8	0.80	g37790 26	81	4050	0.0	(AC005 171) putati ve retrot ranspo son [Arabi dopsis thalia nal]
165225	ATU027 165	ATL8C1 0348:6 85..21 43	nap				ATL8C1 0348:6 85..21 30	0.80	g28275 35	81	1114		(AL021 633) hypoth etical protei n [Arabi dopsis thalia nal]
165226	ATU027 166	ATL8C1 9930:7 1..174 4	nap				ATL8C1 9930:7 1..174 2	0.76	g29953 40	81	829	1.1e- 90	(AL022 244) hypoth etical protei n [Schiz

165227	ATU027 167	ATL8C2 2248:2 325..5 64	nap					ATL8C2 2248:2 251..1 018	0.75	g45212 49, g43357 53	81, 62	1287, 290	3.5e- 132, 5.6e- 30	osacch aromyc es pombe] (AB013 912) DNA helica se [Mus muscul us]; (AC006 284) unknow n protei n [Arabi dopsis thalia na]
165228	ATU027 168	ATL8C1 3997:1 895..1	nap					ATL8C1 3997:1 868..2 1	0.74	g31281 69	81	421	8.7e- 31	(AC004 521) hypoth etical protei n [Arabi dopsis thalia na]
165229	ATU027 169	ATL8C3 4377:9 74..1	nap					ATL8C3 4377:9 74..16	0.70	g42048 04	81	646	1.8e- 49	(U5252 0) cyclin [Pisum sativu m]
165230	ATU027 170	ATL8C3 2138:1	nap					ATL8C3 2138:8	0.69	g29207 06,	81, 46	849, 139	5.0e- 90,	(Y1356 8)

165231	ATU027 171	ATL8C2 0221:1 930..4 80	nap				4..385 8	0.67	g30803 58	81	824	5.0e- 07	beta- xylosi dase [Emeri cella nidula ns]; (AC003 674) unknown protein [Arabi dopsis thalia na]
165232	ATU027 172	ATL8C4 7119:1 ..3783	nap				ATL8C2 0221:1 428..4 80	0.67	g47339 86	81	2330	2.6e- 138	(AL022 580) hypoth etical protein [Arabi dopsis thalia na]
165233	ATU027 173	ATL8C3 5202:1 867..1	nap				ATL8C3 5202:1 867..4	0.66	g22449 88	81	992	3.8e- 107	(AC007 209) hypoth etical protein [Arabi dopsis thalia na]
													(Z9734 0) hypoth

165234	ATU027 174	ATL8C1 6749:1 ..4062	nap					81	ATL8C1 6749:1 3..389 1	0.65	g22135 99	81	4071	0.0	etical protei n [Arabi dopsis thalia na]
165235	ATU027 175	ATL8S2 6516:1 ..637	nap						ATL8S2 6516:5 3..332	0.65	g35488 00	81	721		(AC005 313) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]
165236	ATU027 176	ATL8C4 4222:1 ..5181	nap						ATL8C4 4222:8 8..827 , ATL8C4 4222:4 692..5 155	0.62, 0.70	g42638 31	81	5005	0.0	(AC006 067) putati ve revers e transc riptas e [Arabi dopsis na]

165237	ATU027 177	ATL8C4 1812:6 410..3 077	nap					ATL8C4 1812:6 403..3 077	0.61	g32427 13	81	2837	3.7e- 290	thalia na] (AC003 040) putati ve transp osase [Arabi dopsis thalia na]
165238	ATU027 178	ATL8C1 3167:4 275..1	nap					ATL8C1 3167:3 735..4 32	0.59	g37859 84	81	3249	1.0e- 262	(AC005 560) putati ve revers e transc riptas e [Arabi dopsis thalia na]
165239	ATU027 179	ATL8C2 717:14 21..1	nap					ATL8C2 717:14 21..75 9	0.59	g37860 06	81	1239	5.0e- 109	(AC005 499) hypoth etical protei n [Arabi dopsis thalia na]
165240	ATU027 180	ATL8S5 68:44. .553	nap					ATL8S5 68:101 ..514	0.58	g47339 74	81	599	4.1e- 48	(AC007 264) hypoth etical protei

165241	ATU027 181	ATL8C1 4731:7 984..2 156	nap						ATL8C1 4731:7 449..2 156	0.58	g43888 25	81	1760	1.7e- 135	n [Arabi dopsis thalia na] (AC006 528) putati ve pol polypr oteins with revers e transc riptas e domain (Pfam: PF0007 8) [Arabi dopsis thalia na]
165242	ATU027 182	ATL8C2 6247:1 ..2615	nap						ATL8C2 6247:1 33..23 78	0.57	g38853 36	81	1249	2.6e- 105	(AC005 623) recept or- like protei n kinase [Arabi dopsis thalia na]
165243	ATU027 183	ATL8S1 7707:3 79..1	nap						ATL8S1 7707:3 79..14	0.53	g13817 39	81	365	1.9e- 34	(U5891 1) HI0379

165244	ATU027 184	ATL8C1 1662:1 00..11 17	nap					ATL8C1 1662:4 39..10 38	0.53		g44903 39	81	280	1.1e- 29	(AL035 656) putati ve protei n [Arabi dopsis thalia na]	g [Neiss eria mening itidis]
165245	ATU027 185	ATL8S1 2866:1 20..61 5	nap					ATL8S1 2866:5 64..48 2	0.52		g17857 91	81	697	2.9e- 68	(Y0850 2) orf204 [Arabi dopsis thalia na]	(Y0850 2) orf204 [Arabi dopsis thalia na]
165246	ATU027 186	ATL8S1 5873:1 ..553	nap					ATL8S1 5873:8 2..352	0.49		g25002 57, g11732 84	81, 48	329, 183	1.5e- 31, 3.3e- 15	50S RIBOSO MAL PROTEI N L13 [Synec hocyst is sp.]; 30S RIBOSO MAL PROTEI N S9 [Haemo philus	50S RIBOSO MAL PROTEI N L13 [Synec hocyst is sp.]; 30S RIBOSO MAL PROTEI N S9 [Haemo philus

165247	ATU027 187	ATL8C2 2603:9 15..1	nap						ATL8C2 2603:8 78..20 1	0.49	g36954 11	81	508	2.0e- 44	(AF096 373) T9A4.1 2 gene produc t [Arabi dopsis thalia na]
165248	ATU027 188	ATL8C2 6142:2 330..8	nap						ATL8C2 6142:1 104..8 1	0.49	g40493 99	81	1347	3.4e- 154	(Y0958 1) FRO2 [Arabi dopsis thalia na]
165249	ATU027 189	ATL8C3 7828:4 77..1	nap						ATL8C3 7828:4 77..70	0.48	g29613 76	81	283	8.6e- 09	(AL022 141) hypoth etical protei n [Arabi dopsis thalia na]
165250	ATU027 190	ATL8C3 0866:1 ..4672	nap						ATL8C3 0866:7 2..467 2	0.43	g37790 21	81	3617	0.0	(AC005 171) putati ve revers e transc riptase [Arabi

165251	ATU027 191	ATL8C7 142:78 4..194	nap						ATL8C7 142:67 9..328	0.42	g42622 31	81	491	4.1e- 21	dopsis thalia na] (AC006 200) hypoth etical protei n [Arabi dopsis thalia na]
165252	ATU027 192	ATL8S1 3089:2 69..53 2	nap						ATL8S1 3089:2 69..50 9	0.40	g47339 66	81	323	2.0e- 18	(AC007 261) hypoth etical protei n [Arabi dopsis thalia na]
165253	ATU027 193	ATL8C3 4037:2 36..1	nap								g36953 98	81	133	6.1e- 09	(AF096 372) No defini tion line found [Arabi dopsis thalia na]
165254	ATU027 194	ATL8C2 9671:1 616..9 4	nap								g49144 63	81	634	1.2e- 64	(AL050 400) putati ve protei n

165255	ATU027 195	ATL8C9 923:21 3..612	nap									g44572 21	81	162	5.3e- 13	[Arabi dopsis thalia na] (AF127 797) putati ve bZIP DNA- bindin g protei n [Capsi cum chinen se]
165256	ATU027 196	ATL8C3 1412:1 335..1	nap									g45876 78	81	997	2.0e- 97	(AC007 197) putati ve diseas e resist ance gene, 5', partia l [Arabi dopsis thalia na]
165257	ATU027 197	ATL8C1 4424:4 038..3 395	nap									g45859 24	81	479	1.7e- 46	(AC007 211) hypoth etical protei n

165258	ATU027 198	ATL8S2 6998:5 57..1	nap									g25067 90	81	442		[Arabi dopsis thalia na]
165259	ATU027 199	ATL8C4 4228:7 353..9 107	nap									g45672 96	81	1918	2.3e- 178	CYTIDY LATE KINASE (CK) (CYTID INE MONOPH OSPHAT E KINASE) (CMP) (CMP KINASE) (MSSA PROTEI N) (P25) [Esche richia coli]
165260	ATU027 200	ATL8C2 1577:1	nap									g29593 58	81	250	8.6e- 26	(AC006 918) putati ve Athila retroee lement ORF1 protei n [Arabi dopsis thalia na] (X9675 8)

165261	ATU027 201	ATL8C3 6248:2 30..17 97	nap										g34618 24	81	1788	6.8e- 120	(AC004 138) hypoth etical protein [Arabi dopsis thalia na]	clathr in coat assemb ly protei n AP17 [Zea mays]
165262	ATU027 202	ATL8S2 7482:1 ..468	nap										g24628 34	81	246	1.5e- 24	(AF000 657) hypoth etical protein [Arabi dopsis thalia na]	
165263	ATU027 203	ATL8C1 3284:5 95..1	nap										g37765 65	81	777	4.4e- 79	(AC005 388) T22H22 .8 [Arabi dopsis thalia na]	
165264	ATU027 204	ATL8C3 3852:1 188..3	nap										g41153 63	81	1832		(AC005 957) putati	

165267	ATU027 207	ATL8C4 0616:3 2..107 4	nap											g41853 10	81	856	1.0e- 100	n [Brass ica rapa] (AF090 446) gag protei n [Zea mays]
165268	ATU027 208	ATL8C3 1700:4 33..1	nap											g46894 77	81	658	4.4e- 65	(AC007 213) pseud ogene [Arabi dopsis thalia na]
165269	ATU027 209	ATL8C3 9289:1 714..3 373	nap											g44544 77	81	626	1.5e- 58	(AC006 234) hypoth etical protei n [Arabi dopsis thalia na]
165270	ATU027 210	ATL8C6 572:43 6..1	nap											g45389 59	81	141	5.2e- 13	(AL049 488) putati ve protei n [Arabi dopsis thalia na]
165271	ATU027	ATL8C3	nap											g41159	81	1298	8.1e-	(AF118)

211	3329:3 3..100 0									14	133	222) contai ns simila rity to Iron/A scorba te family of oxidor educta ses (Pfam: PF0067 1, Score= 297.8, E=1.3e -85, N=1) [Arabi dopsis thalia nal		
165272	ATU027 212	ATL8S1 320:58 3..175	nap							g40068 23	81	51	0.0004 3	(AC005 970) hypoth etical protei n [Arabi dopsis thalia nal]
165273	ATU027 213	ATL8C4 904:87 5..1	nap							g45860 41	81	911	1.2e- 93	(AC007 020) hypoth etical

165274	ATU027 214	ATL8C2 3450:1 ..1010	nap									g26233 06	81	587	7.0e- 67	protein [Arabis dopsis thaliana] (AC002 409) unknown protein [Arabis dopsis thaliana]
165275	ATU027 215	ATL8C1 4683:4 02..82 3	nap									g38513 41	81	72	0.012	(AF000 167) 14.3 kDa perchloric acid soluble protein [Capra hircus]
165276	ATU027 216	ATL8S1 6041:2 23..1	nap									0.98	80	134	3.5e- 09	EXODEO XYRIBO NUCLEA SE SMALL SUBUNIT (EXONUCLEA SE) VII

165277	ATU027 217	ATL8S6 272:50 2..1	nap					ATL8S6 272:49 6..17	0.97		g29504 11	80	264			SMALL SUBUNIT [Escherichia coli] (Al022 075) hypothetical protein Rv3588 C [Mycobacterium tuberculosis]
165278	ATU027 218	ATL8S1 9439:4 43..52	nap					ATL8S1 9439:1 57..52	0.93		g42932	80	116	2.8e- 08		(X5617 5) ORF 3 (AA 1 - 110) [Escherichia coli]
165279	ATU027 219	ATL8C2 3814:2 52..31 60	nap					ATL8C2 3814:2 52..22 82, ATL8C2 3814:3 082..2 932	0.92, 0.78		g47739 20	80	2141	1.2e- 205		(AF147 259) F10A2. 17 gene product [Arabis dopsis thaliana]
165280	ATU027	ATL8C2	nap					ATL8C2	0.91		g45875	80	957	1.5e-		(AC006

220	6092:1 ..1724					6092:3 89..17 24	49		77	577) Simila r to gb U55 861 RNA bindin g protei n nucleo lysin (TIAR) from Mus muscul us and contai ns severa l PF 000 76 RNA recogn ition motif domain S. ESTs gb T21 032 and gb T44 127 come from this gene. [Arabi dopsis
-----	------------------	--	--	--	--	------------------------	----	--	----	---

165281	ATU027 221	ATL8C1 6065:1 079..7	nap				ATL8C1 6065:9 74..21 5	0.91	g47340 01	80	612	2.1e- 68	t... [(AC007 187) hypoth etical protei n [Arabi dopsis thalia na]
165282	ATU027 222	ATL8C9 42:375 3..218 4	nap				ATL8C9 42:374 0..218 4	0.89	g45858 97	80	656	8.2e- 58	(AC007 133) hypoth etical protei n, 5' partia l [Arabi dopsis thalia na]
165283	ATU027 223	ATL8C8 033:31 13..22 33	nap				ATL8C8 033:30 82..22 33	0.88	g22135 95	80	833	2.0e- 88	(AC000 348) T7N9.1 5 [Arabi dopsis thalia na]
165284	ATU027 224	ATL8C4 2554:2 664..1	nap				ATL8C4 2554:2 664..3 44	0.87	g43888 21	80	1672	3.0e- 177	(AC006 528) putati ve mudra transp osase protei

165285	ATU027 225	ATL8S2 8713:4 32..1	nap					ATL8S2 8713:3 93..10	0.86	g21207 80	80	271	3.4e- 26	n [Arabi dopsis thalia na]
165286	ATU027 226	ATL8C4 6927:5 25..18 60	nap					ATL8C4 6927:1 238..1 748	0.85	g36953 82	80	590	1.4e- 47	(AF096 370) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Tall-1 (GB:L4 7193) [Arabi dopsis thalia

165287	ATU027 227	ATL8C5 741:1. .1977	nap				ATL8C5 741:29 2..197 7	0.84	g40380 52	80	137		na] (AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
165288	ATU027 228	ATL8S5 330:29 2..1	nap				ATL8S5 330:15 9..101	0.84	g39280 91	80	43	4.0e- 05	(AC005 770) unknow n protei n [Arabi dopsis thalia na]
165289	ATU027 229	ATL8C4 4660:2 333..1	nap				ATL8C4 4660:2 262..5 2	0.83	g22447 53	80	2478	1.2e- 223	(Z9733 5) hypoth etical protei n [Arabi dopsis thalia na]
165290	ATU027 230	ATL8C3 936:1. .426	nap				ATL8C3 936:10 8..420	0.83	g10844 54	80	382	2.6e- 38	peptid ylprol yl isomer ase (EC 5.2.1. 8) Cyp1 -

165291	ATU027 231	ATL8C4 6085:1 ..2565	nap							0.83	g27087 44	80	1265	2.9e- 99	(AC003 952) putati ve Bop- like zinc finger protei n [Arabi dopsis thalia nal]	rice [Oryza sativa]
165292	ATU027 232	ATL8C2 8122:5 12..1	nap							0.81	g26459 77	80	449	1.0e- 45	(AF034 202) prolif eratin g cell nuclea r antige n [Isoch rysis galban al]	
165293	ATU027 233	ATL8C1 2569:2 358..6 52	nap							0.80	g43888 21	80	1342	1.5e- 109	(AC006 528) putati ve mudra transp osase protei n	

165294	ATU027 234	ATL8C2 6485:1 ..1445	nap					ATL8C2 6485:2 18..14 32	0.80		g36680 81	80	262	8.9e- 22	[Arabi dopsis thalia nal] (AC004 667) putati ve peptid ase [Arabi dopsis thalia nal]
165295	ATU027 235	ATL8S2 5773:1 ..427	nap					ATL8S2 5773:6 7..376	0.77		g13264 1	80	378	3.7e- 32	50S RIBOSO MAL PROTEI N L10 [Strep tomyce s antibi oticus]
165296	ATU027 236	ATL8C3 9970:1 006..2 775	nap					ATL8C3 9970:1 006..2 607	0.76		g38057 57, g45443 75	80, 35	179, 1697	7.3e- 15, 2.2e- 169	(AC005 693) putati ve revers e transc riptas e [Arabi dopsis thalia nal]; (AC006 920)

165297	ATU027 237	ATL8S2 702:59 6..1	nap						0.76	g26242 87	80	344	3.0e- 33	(AL008 967) hypoth etical protei n Rv2765 [Mycob acteri um tuberc ulosis]
165298	ATU027 238	ATL8C1 0466:2 512..5 201	nap						0.75	g28092 37	80	1183		(AC002 560) F21B7. 6 [Arabi dopsis thalia na]
165299	ATU027 239	ATL8C3 3906:1 34..19 78	nap						0.74	g21911 95	80	2429		(AF007 271) contai ns simila rity to T. cruzi

165300	ATU027 240	ATL8C2 6604:2 470..8 68	nap						ATL8C2 6604:2 470..8 68	0.73	g45811 54	80	1965	7.0e- 175	3' end fragment (PID:g 161956) [Arabi dopsis thalia na]
165301	ATU027 241	ATL8S9 897:1. .469	nap						ATL8S9 897:15 0..469	0.73	g14016 3	80	208	1.0e- 13	HYPOTH ETICAL 17.4 KD PROTEI N IN FRUR- FTSL INTERG ENIC REGION (ORFC) [Esche richia coli]
165302	ATU027 242	ATL8C6 893:1. .1765	nap						ATL8C6 893:10 12..17 65	0.71	g32192 71	80	409	7.6e- 49	(AB015 315) MAP kinase kinase

165303	ATU027 243	ATL8C3 351:22 56..90 0	nap							ATL8C3 351:22 56..11 45	0.67	g45394 59	80	753	2.0e- 60	4 [Arabi dopsis thalia na] (AL049 500) putati ve protei n. [Arabi dopsis thalia na]
165304	ATU027 244	ATL8C4 3321:3 315..1	nap							ATL8C4 3321:3 294..5 23	0.66	g45811 10	80	2954		(AC005 825) putati ve retrot ranspo son polyp otein [Arabi dopsis thalia na]
165305	ATU027 245	ATL8C3 2127:8 68..1	nap							ATL8C3 2127:8 41..59	0.65	g39245 97	80	347	6.8e- 35	(AF069 442) putati ve oxidor educta se [Arabi dopsis thalia na]
165306	ATU027	ATL8C2	nap							ATL8C2	0.65	g32528	80	390	1.4e-	(AC004

165307	246	2430:1 ..1467	nap				2430:1 197..6 87	0.65	g12638 6	80	131	50	705) hypoth etical protei n [Arabi dopsis thalia na]
	ATU027 247	ATL8S6 988:1. .251	nap				ATL8S6 988:48 ..251	0.65	g12638 6	80	131		POLLEN ALLERG EN LOL P 2-A (LOL P II-A) []
165308	ATU027 248	ATL8C1 6717:1 ..1042	nap				ATL8C1 6717:1 96..10 42	0.63	g45858 77	80	287	5.3e- 27	(AC005 850) Hypoth etical protei n [Arabi dopsis thalia na]
165309	ATU027 249	ATL8C2 3753:1 ..3333	nap				ATL8C2 3753:3 15..28 70	0.60	g41153 61, g41153 62, g46894 52	80, 51, 35	815, 1094, 239	1.9e- 63, 4.1e- 82, 6.4e- 20	(AC005 957) hypoth etical protei n [Arabi dopsis thalia na]; (AC005 957) hypoth etical

165310	ATU027 250	ATL8C1 5324:6 33..21 75	nap							ATL8C1 5324:6 33..21 46	0.60	g41851 38	80	1630	3.6e- 146	prote n [Arabi dopsis thalia na]; (AC006 267) putati ve transp oson protei n [Arabi dopsis thalia na] (AC005 724) putati ve transl ation initia tion factor eIF-2 gamma subuni t [Arabi dopsis thalia na]
165311	ATU027 251	ATL8C3 2069:1 ..2423	nap							ATL8C3 2069:2 67..22 09	0.59	g45859 90	80	3041	4.0e- 259	(AC005 287) Very simila r to

165313	ATU027 253	ATL8C4 9461:2 361..1	nap			ATL8C4 9461:2 361..1 351	0.57	g45672 16	80	1352	5.3e- 140	(AC007 113) hypo- thetical protein [Arabi- dopsis thaliana]
165314	ATU027 254	ATL8C4 5548:9 67..1	nap			ATL8C4 5548:9 25..22	0.54	g28282 81	80	548	5.3e- 49	(AL021 687) hypo- thetical protein [Arabi- dopsis thaliana]
165315	ATU027 255	ATL8C4 0636:4 7..108 0	nap			ATL8C4 0636:4 7..599	0.51	g13635 28	80	1217	7.8e- 121	gag protein - maize [Zea mays]
165316	ATU027 256	ATL8C7 446:13 19..16 86	nap			ATL8C7 446:15 08..14 21	0.51	g24628 21	80	309	2.6e- 17	(AF000 657) hypo- thetical protein [Arabi- dopsis thaliana]
165317	ATU027 257	ATL8C2 0214:1 ..2430	nap			ATL8C2 0214:8 2..242 4	0.51	g40080 10	80	1882	6.7e- 177	(AF084 036) recept or-

165318	ATU027 258	ATL8C1 3086:1 ..5114	nap					ATL8C1 3086:1 49..50 14	0.48	g45875 84	80	2698	5.7e- 292	like protei n kinase [Arabi dopsis thalia na] (AC007 232) unknow n protei n [Arabi dopsis thalia na]
165319	ATU027 259	ATL8C4 2040:3 563..1	nap					ATL8C4 2040:3 451..4 36	0.46	g43253 54	80	2467	7.4e- 265	(AF128 395) contai ns simila rity to retrov irus- relate d polypr oteins and to CCHC zinc finger protei n (Pfam: PF0009 8,

165320	ATU027 260	ATL8C4 7424:1 ..3856	nap					ATL8C4 7424:5 5..385 6	0.46	g33193 60	80	2890	1.6e- 284	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]	Score= 16.3, E=0.05 1, E= 1) [Arabi dopsis thalia na]
165321	ATU027 261	ATL8C2 2372:9 40..1	nap					ATL8C2 2372:8 12..40	0.45	g46782 88	80	576	2.2e- 67	(AL049 660) putati ve protei n [Arabi dopsis thalia na]	(AL049 660) putati ve protei n [Arabi dopsis thalia na]

165322	ATU027 262	ATL8C2 539:13 04..1	nap			ATL8C2 539:12 39..77	0.44	g43097 56	80	2082	2.0e- 188	(AC006 217) putati ve transp osase [Arabi dopsis thalia na]
165323	ATU027 263	ATL8C5 743:53 4..222 4	nap			ATL8C5 743:58 9..125 5	0.42	g44328 31	80	1544		(AC006 283) hypoth etical protei n [Arabi dopsis thalia na]
165324	ATU027 264	ATL8C4 5004:1 04..41 78	nap			ATL8C4 5004:1 04..41 25	0.42	g42493 81, g42637 63	80, 59	4048, 224	0.0, 3.8e- 20	(AC005 966) Strong simila rity to gb AF0 39376 Evelkn ievel retrot ranspo son polypr otein from Arabid opsis arenos a.

165325	ATU027 265	ATL8C5 833:32 43..12 01	nap						ATL8C5 833:31 28..12 01	0.41	g10844 27	80	298		[Arabi dopsis thalia na]; (AC006 218) putati ve revers e transc riptas e, 5', partia l [Arabi dopsis thalia na]
165326	ATU027 266	ATL8C2 6160:3 89..70 8	nap								g49268 29	80	164	0.0029	(AC004 135) T17H7. 14 [Arabi dopsis thalia na]
165327	ATU027 267	ATL8C3 377:51 1..33	nap								g45127 00	80	411	3.4e- 30	(AC006 569) putati

165328	ATU027 268	ATL8S1 9795:5 06..1	nap									g46802 22	80	284	7.7e- 23	(AF115 381) respon se regula tor GacA [Pseud omonas aureof aciens , hypoth etical protei n [Arabi dopsis thalia nal]
165329	ATU027 269	ATL8C2 4359:1 256..1	nap									g38602 52	80	1362	3.9e- 144	(AC005 824) hypoth etical protei n [Arabi dopsis thalia nal]
165330	ATU027 270	ATL8C8 880:1. .775	nap									g45389 30	80	695	3.5e- 65	(AL049 483) putati ve peroxi dase [Arabi dopsis thalia nal]

165338	ATU027 278	ATL8C3 333:21 62..1	nap							g39133 66	80	2199	1.7e- 228	n [Arabi dopsis thalia nal] PUTATI VE RECEPT OR PROTEI N KINASE CRINKL Y4 PRECUR SOR [Zea mays]
165339	ATU027 279	ATL8C1 5491:4 395..2 168	nap							g35488 10	80	477	8.1e- 48	(AC005 313) putati ve chloro plast nucleo id DNA bindin g protei n [Arabi dopsis thalia nal]
165340	ATU027 280	ATL8S2 8818:1 ..218	nap							g37774 85	80	94	6.0e- 06	(AB018 706) ORF1 [Nitro somona s]

165349	ATU027 289	ATL8C3 8693:1 55..1	nap								g34451 99	80	230	3.5e- 18	(AC004 786) hypoth etical protei n [Arabi dopsis thalia na]
165350	ATU027 290	ATL8C3 2332:1 ..1312	nap								g35401 96	80	1293	2.2e- 128	(AC004 260) Putati ve amp- bindin g protei n [Arabi dopsis thalia na]
165351	ATU027 291	ATL8C2 6718:3 102..4 109	nap								g45876 08	80	159	9.8e- 12	(AC006 951) putati ve polyga lactur onase [Arabi dopsis thalia na]
165352	ATU027 292	ATL8C1 327:1. ..1004	nap								g47339 82	80	1139	4.5e- 104	(AC007 268) hypoth etical protei n

165356	ATU027 296	ATL8C1 4738:1 975..1	nap							g47739 20	80	1946	5.0e- 188	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]
165357	ATU027 297	ATL8C3 0159:1 ..184	nap							g11715 03	80	128	1.8e- 08	(X9536 3) gamma- thioni n [Capsi cum annuum]
165358	ATU027 298	ATL8C2 7934:7 09..46 0	nap							g42204 78	80	366		(AC006 069) hypoth etical protei n [Arabi dopsis thalia na]
165359	ATU027 299	ATL8C2 7875:1 627..1	nap							g28275 46	80	993		(AL021 635) cytoch rome P450 like protei n [Arabi dopsis thalia na]

165360	ATU027 300	ATL8C7 299:61 10..17 0	nap				ATL8C7 299:23 70..17 72	0.99	g42638 31	79	4256	0.0	thalia na] (AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia na]
165361	ATU027 301	ATL8C2 0089:1 ..876	nap				ATL8C2 0089:8 9..876	0.98	g18256 36	79	280		(U8817 2) ZK354. 3 gene produc t [Caeno rhabdi tis elegan s]
165362	ATU027 302	ATL8S2 9251:5 09..5	nap				ATL8S2 9251:4 63..10 7	0.98	g18546 03	79	181	2.4e- 08	(U4913 4) 70- kDa heat shock protei n [unide ntifie d soil organi sm]
165363	ATU027 303	ATL8S1 1604:5	nap				ATL8S1 1604:1	0.97	g45672 70	79	389	1.0e- 37	(AC006 841)

165364	ATU027 304	ATL8C4 3943:6 23..15 42	nap				74..7	0.97	g28327 09	79	962		unknown protein [Arabidopsis thaliana]
165365	ATU027 305	ATL8C2 3842:1 320..4 99	nap				ATL8C2 3842:1 216..5 32	0.96	g27813 51	79	402	3.0e- 34	(AL021 713) neoxanthin cleavage enzyme- like protein [Arabidopsis thaliana]
165366	ATU027 306	ATL8S1 8063:1 ..412	nap				ATL8S1 8063:3 3..206	0.95	g45811 45	79	199	8.5e- 10	(AC006 919) putative transcriptio nal activator CBF1

165367	ATU027 307	ATL8C2 4609:1 ..1194	nap					ATL8C2 4609:7 36..20 8	0.95	g43888 26	79	841	3.7e- 82	[Arabi dopsis thalia na] (AC006 528) hypoth etical protei n [Arabi dopsis thalia na]
165368	ATU027 308	ATL8C3 1756:1 276..5 91	nap					ATL8C3 1756:1 051..9 89	0.94	g42042 60	79	195	5.4e- 16	(AC005 223) 25568 [Arabi dopsis thalia na]
165369	ATU027 309	ATL8C3 0181:7 49..13 43	nap					ATL8C3 0181:8 23..12 68	0.94	g49268 23	79	175	1.0e- 18	(AC004 135) T17H7. 8 [Arabi dopsis thalia na]
165370	ATU027 310	ATL8C3 5095:8 2..334 3	nap					ATL8C3 5095:1 10..10 12	0.93	g37383 37	79	3016	1.9e- 302	(AC005 170) putati ve revers e transc riptas e [Arabi dopsis

165371	ATU027 311	ATL8S2 9744:1 ..404	nap				ATL8S2 9744:3 9..386	0.92	g32419 71	79	205	1.8e- 18	thalia na] (U7958 0) ChpC [Pseud omonas aerugi nosai]
165372	ATU027 312	ATL8C3 7497:3 170..2 003	nap				ATL8C3 7497:2 956..2 003	0.92	g42205 14	79	678		(AL035 356) putati ve protei n [Arabi dopsis thalia na]
165373	ATU027 313	ATL8S1 0512:1 ..495	nap				ATL8S1 0512:1 30..49 5	0.92	g45673 15	79	96	1.0e- 10	(AC005 956) hypoth etical protei n [Arabi dopsis thalia na]
165374	ATU027 314	ATL8C4 8201:6 41..96	nap				ATL8C4 8201:4 97..97	0.91	g47339 95	79	489	5.9e- 50	(AC007 188) hypoth etical protei n [Arabi dopsis thalia na]
165375	ATU027	ATL8S1	nap				ATL8S1	0.90	g28298	79	485	9.3e-	(AC002

165376	315	0573:1 ..556						0573:2 07..53 2	0.90		73					38	396) Hypoth etical protei n [Arabi dopsis thalia nal]
	ATU027 316	ATL8C1 4413:3 717..2 556	nap					ATL8C1 4413:3 546..2 556			g20621 67	79	653			1.8e- 62	(AC001 645) Prolin e-rich protei n APG isolog [Arabi dopsis thalia nal]
165377	ATU027 317	ATL8C3 2678:1 708..3 86	nap					ATL8C3 2678:9 90..38 6	0.89		g26243 28	79	122			1.5e- 11	(AJ002 894) OsGRP2 [Oryza sativa]
165378	ATU027 318	ATL8S1 8570:1 ..517	nap					ATL8S1 8570:2 60..49 2	0.88		g28978 73	79	223			2.7e- 20	(U8151 6) unknow n [Myxoc occus xanthu s]
165379	ATU027 319	ATL8C8 058:1. .702	nap					ATL8C8 058:14 ..671	0.86		g28092 35	79	118			1.7e- 11	(AC002 560) F21B7. 4 [Arabi dopsis

165380	ATU027 320	ATL8S6 191:1. .415	nap				ATL8S6 191:56 ..415	0.85	g17033 50	79	360		thalia nal
165381	ATU027 321	ATL8C1 0424:1 ..1399	nap				ATL8C1 0424:6 08..13 98	0.84	g21601 63	79	1525		(AC000 132) No defini tion line found [Arabi dopsis thalia nal]
165382	ATU027 322	ATL8S6 31:1.. 637	nap				ATL8S6 31:52. .550	0.84	g46894 52	79	364	7.7e- 36	(AC006 267) putati ve transp oson protei n [Arabi dopsis thalia nal]
165383	ATU027 323	ATL8C4 8542:3 786..4	nap				ATL8C4 8542:3 994..4	0.80	g34137 10	79	592	2.4e- 62	(AC004 747) hypoth

		993							993							etical protei n [Arabi dopsis thalia nal]
165384	ATU027 324	ATL8C6 770:32 39..1	nap						ATL8C6 770:25 77..14 61	0.79	g25831 30	79	2076	2.5e- 198	(AC002 387) putati ve revers e transc riptas e [Arabi dopsis thalia nal]	
165385	ATU027 325	ATL8C2 0685:1 ..721	nap						ATL8C2 0685:1 01..72 1	0.78	g43097 03	79	917	9.4e- 61	(AC006 266) putati ve transp oson protei n [Arabi dopsis thalia nal]	
165386	ATU027 326	ATL8C1 6881:5 1..324 7	nap						ATL8C1 6881:2 54..32 15	0.74	g54865 9	79	708	1.4e- 67	DNA REPAIR PROTEI N RAD16 [Schiz osacch aromyc	

165387	ATU027 327	ATL8C3 0523:1 896..4 37	nap					ATL8C3 0523:1 863..4 37	0.74	g40068 51	79	1632	1.4e- 152	es pombel (Z9970 7) cytoch rome P450- like protei n [Arabi dopsis thalia nal]
165388	ATU027 328	ATL8S2 2234:1 ..552	nap					ATL8S2 2234:3 80..55 2	0.73	g17179 75	79	209	4.4e- 20	14.5 KD TRANSL ATIONA L INHIBI TOR PROTEI N (P14.5) (UK114 ANTIGE N HOMOLO G) [Homo sapien sl]
165389	ATU027 329	ATL8C2 8211:4 739..8 97	nap					ATL8C2 8211:4 739..1 099	0.73	g42636 55	79	2345	2.2e- 270	(AC006 136) putati ve revers e transc

165390	ATU027 330	ATL8C3 5187:1 ..1722	nap					ATL8C3 5187:5 70..16 66	0.73	g30470 83	79	935	6.4e- 71	riptase [Arabi dopsis thalia nal] (AF058 914) simila r to FLAP endonu clease -1 (SW:P3 9748) [Arabi dopsis thalia nal]
165391	ATU027 331	ATL8C4 189:84 ..497	nap					ATL8C4 189:12 0..489	0.72	g46893 66	79	120	2.9e- 06	(AF134 155) RING finger protei n [Arabi dopsis thalia nal]
165392	ATU027 332	ATL8C4 3970:6 58..21 91	nap					ATL8C4 3970:6 61..19 18	0.71	g38602 67	79	1499		(AC005 824) hypothe tical protei n [Arabi dopsis thalia nal]

165393	ATU027 333	ATL8C3 9202:1 ..835	nap				ATL8C3 9202:5 7..835	0.70	g44173 07	79	957	2.0e- 96	(AC006 446) putati ve pol polypr oteins [Arabi dopsis thalia na]
165394	ATU027 334	ATL8C1 2735:2 365..1	nap				ATL8C1 2735:2 097..1 042	0.68	g27393 74	79	1090	1.2e- 117	(AC002 505) hypoth etical protei n [Arabi dopsis thalia na]
165395	ATU027 335	ATL8S1 0191:1 ..435	nap				ATL8S1 0191:1 18..43 5	0.68	g22424	79	686	8.4e- 67	(X5757 5) polyga lactur onase [Zea mays]
165396	ATU027 336	ATL8C1 6962:3 392..6 171	nap				ATL8C1 6962:3 392..6 161	0.67	g31842 91	79	2651	3.0e- 211	(AC004 136) putati ve DNA polyme rase III gamma subuni t [Arabi dopsis thalia]

165397	ATU027 337	ATL8C9 056:13 94..1	nap				ATL8C9 056:13 94..22	0.66	g47340 14	79	433		na]
165398	ATU027 338	ATL8C4 3208:1 ..437	nap				ATL8C4 3208:5 2..372	0.65	g43374 46	79	293	2.0e- 22	(U8916 6) ECORLD ORF1; -simila r to the Pseudo monas aerugi nosa ORF upstre am of the Azu gene and to the Rhodoc occus fascia ns fas operon ORF6 protei n, encode d by

165400	ATU027 340	ATL8C4 4175:2 04..37 89	nap						0.64	g40068 33	79	2913	4.3e- 311	thalia nal; (AC006 955) hypoth etical protei n [Arabi dopsis thalia nal]
165401	ATU027 341	ATL8C3 8054:1 975..1	nap						0.64	g46801 80	79	1889	2.3e- 190	(AF111 709) polypr oteins [Oryza sativa subsp. indica]
165402	ATU027 342	ATL8C3 6863:1 958..4 420	nap						0.63	g30969 19	79	1578	7.5e- 119	(AL023 094) putati ve serine /threo

165403	ATU027 343	ATL8C4 403:29 02...1	nap					ATL8C4 403:28 04...22 6	0.60	g33778 24	79	2727	1.1e- 293	nine protei n kinase [Arabi dopsis thalia nal] (AF075 598) contai ns simila rity to revers e transc riptas es [Arabi dopsis thalia nal]
165404	ATU027 344	ATL8C1 725:1. .8756	nap					ATL8C1 725:13 0...875 6	0.59	g42637 68, g43357 20, g40380 56	79, 71, 33	1495, 3367, 225	1.5e- 135, 0.0, 1.4e- 25	(AC006 218) hypoth etical protei n [Arabi dopsis thalia nal]; (AC006 248) putati ve revers e

165407	ATU027 347	ATL8C5 0057:1 720..1	nap					ATL8C5 0057:1 720..9 4	0.55	g45392 98	79	1842	4.1e- 179	(AL049 480) putati ve calmod ulin- bindin g protei n [Arabi dopsis thalia nal]
165408	ATU027 348	ATL8C6 650:76 ..475	nap					ATL8C6 650:76 ..189	0.54	g21480 45	79	80	0.071	self- incomp atibil ity protei

165409	ATU027 349	ATL8C1 2095:1 255..7 7	nap						ATL8C1 2095:1 193..7 7	0.50			g28322 44	79	1202	4.1e- 112	n S3 precu sor - Papave r rheas [Papav er rheas]
165410	ATU027 350	ATL8C2 0903:1 518..1	nap						ATL8C2 0903:1 518..2 1	0.49			g41853 10	79	2122	1.4e- 196	(AF031 569) hypoth etical protei n [Zea mays]
165411	ATU027 351	ATL8C4 3368:7 276..2 93	nap						ATL8C4 3368:6 535..2 391	0.49			g42635 44, g33193 60	79, 56	3566, 1796		(AF090 446) gag protei n [Zea mays]
																	(AC006 250) putati ve Athila retroe lement ORF1 protei n [Arabi dopsis thalia nal]; (AF077

[illegible]

165413	ATU027 353	ATL8C1 437:99 8..243 8	nap						ATL8C1 437:23 66..12 98	0.45	g36953 97	79	1149	5.8e- 88	[Arabi dopsis thalia na] (AF096 372) No defini tion line found [Arabi dopsis thalia na]
165414	ATU027 354	ATL8C4 3530:1 ..1353	nap						ATL8C4 3530:3 8..675	0.44	g38343 19	79	700		(AC005 679) Simila r to [Arabi dopsis thalia na]
165415	ATU027 355	ATL8S1 7235:4 65..1	nap						ATL8S1 7235:4 65..25	0.44	g27088 01	79	235	7.0e- 13	(AF035 751) hypo thetical protein [Synec hococ cus PCC700 2]
165416	ATU027 356	ATL8C3 8950:1 062..1	nap								g35488 00	79	451	2.1e- 48	(AC005 313) putati ve diseas e

165417	ATU027 357	ATL8C3 7620:7 99..1	nap										g37023 39	79	473	4.3e- 49	resistance protein [Arabidopsis thaliana]
165418	ATU027 358	ATL8S1 6803:1 62..62 4	nap										g17426 87	79	288	3.5e- 21	(D90806) Ferredoxin II. [Escherichia coli]
165419	ATU027 359	ATL8C4 9508:1 47..76 2	nap										g42621 78	79	589	7.5e- 40	(AC005508) 25726 [Arabidopsis thaliana]
165420	ATU027 360	ATL8C3 6652:3 804..4 551	nap										g33416 91	79	953	1.6e- 43	(AC003672) putative heterogeneous

165421	ATU027 361	ATL8C4 1784:1 ..608	nap									g45393 91	79	754	4.5e- 78	(AL035 526) putati ve protei n [Arabi dopsis thalia nal]	nuclea r ribonu cleopr otei n Al [Arabi dopsis thalia nal]
165422	ATU027 362	ATL8C4 8534:2 62..14 82	nap									g31842 90	79	1580	4.4e- 83	(AC004 136) hypoth etical protei n [Arabi dopsis thalia nal]	(AC004 136) hypoth etical protei n [Arabi dopsis thalia nal]
165423	ATU027 363	ATL8S1 5415:1 ..358	nap									g18772 55	79	357	1.1e- 32	(Z9277 0) hypoth etical protei n Rv0130 [Mycob acteri um]	(Z9277 0) hypoth etical protei n Rv0130 [Mycob acteri um]

165428	ATU027 368	ATL8C2 2271:4 43..1	nap							g19463 67	79	157	6.1e- 14	(U9321 5) unknown protein [Arabi dopsis thalia na]
165429	ATU027 369	ATL8S4 886:57 0..1	nap							g42621 45	79	818	9.6e- 76	(AC005 275) hypoth etical protein [Arabi dopsis thalia na]
165430	ATU027 370	ATL8C1 3293:2 164..1 184	nap							g45899 54	79	477	2.4e- 27	(AC007 169) hypoth etical protein [Arabi dopsis thalia na]
165431	ATU027 371	ATL8C8 61:248 9..660	nap							g44688 04	79	1051	9.4e- 130	(AL035 601) putati ve protein [Arabi dopsis thalia na]

165432	ATU027 372	ATL8C4 9637:1 ..524	nap						g20671 6	79	131	0.0010	(M6479 1) saliva ry prolin e-rich protei n [Rattu s norveg icus]
165433	ATU027 373	ATL8C3 314:18 47..1	nap						g32427 13	79	2497	2.4e- 237	(AC003 040) putati ve transp osase [Arabi dopsis thalia na]
165434	ATU027 374	ATL8C3 1207:2 962..1 73	nap						g38735 50	79	100	0.99	(AL033 534) serine -rich protei n [Schiz osacch aromyc es pombe]
165435	ATU027 375	ATL8C2 354:96 2..1	nap						g45394 30	79	451	3.4e- 51	(AL049 171) putati ve protei n [Arabi

165441	ATU027 381	ATL8C9 813:17 14..87 81	nap						ATL8C9 813:17 14..76 91, ATL8C9 813:83 77..87 72	0.92, 0.80	g43097 65	78	4038	0.0	bindin g protei n [strep tomyce s coelic olor] (AC006 217) putati ve retrot ranspo son polypr otein [Arabi dopsis thalia na] (Z9734 0) simila rity to copia- like retrot ranspo son [Arabi dopsis thalia na] HYPOTH ETICAL 23.2 KD
165442	ATU027 382	ATL8C3 4552:9 21..75	nap						ATL8C3 4552:8 95..75	0.92	g22449 60	78	893	2.3e- 88	
165443	ATU027 383	ATL8S2 0155:4 82..1	nap						ATL8S2 0155:4 62..72	0.90	g14038 9	78	236	3.0e- 22	

165444	ATU027 384	ATL8C1 5915:1 54...36 35	nap					ATL8C1 5915:1 74...35 41	0.90	g26424 31	78	3485	0.0	PROTEIN IN RNE- RPMF INTERG ENIC REGION (ORFY) [Esche richia coli]
165445	ATU027 385	ATL8C3 3836:1 ...5035	nap					ATL8C3 3836:1 08...36 9, ATL8C3 3836:4 946...4 772	0.87, 0.88	g42638 31	78	4493		(AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia na]
165446	ATU027 386	ATL8C2 1674:1 ...3380	nap					ATL8C2 1674:5 09...32	0.87	g30470 72	78	3032	7.7e- 229	(AF058 825) No

165449	ATU027 389	ATL8C5 580:15 10..23 8	nap				ATL8C5 580:14 57..23 8	0.85	g14028 94	78	457	2.3e- 48	(X9686 7) adenin e phosph oribos yltran sferase [Arabi dopsis thalia na]
165450	ATU027 390	ATL8C2 3917:9 21..29 16	nap				ATL8C2 3917:9 21..22 20	0.84	g47551 87	78	1532	2.2e- 143	(AC007 018) hypoth etical protei n [Arabi dopsis thalia na]
165451	ATU027 391	ATL8C3 8833:6 52..15 45	nap				ATL8C3 8833:6 82..13 86	0.83	g72910 2	78	519	3.2e- 50	CHALCO NE-- FLAVON ONE ISOMER ASE [Arabi dopsis thalia na]
165452	ATU027 392	ATL8C2 4253:2 556..4 00	nap				ATL8C2 4253:2 201..6 48	0.83	g22621 05	78	1733	2.9e- 167	(AC002 343) unknown protein

165453	ATU027 393	ATL8C4 2594:9 30..1	nap					ATL8C4 2594:7 86..11 9	0.83	g47339 82	78	872	5.1e- 88	[Arabi dopsis thalia na] (AC007 268) hypoth etical protei n [Arabi dopsis thalia na]
165454	ATU027 394	ATL8C1 4575:1 053..2 12	nap					ATL8C1 4575:7 37..21 2	0.81	g46783 74	78	175	1.3e- 08	(AL049 656) myb- like protei n [Arabi dopsis thalia na]
165455	ATU027 395	ATL8C9 347:22 87..1	nap					ATL8C9 347:20 28..28	0.81	g46512 02	78	1215	2.9e- 113	(AB026 253) copper amine oxidas e [Pisum sativu m]
165456	ATU027 396	ATL8C4 8046:1 39..19 83	nap					ATL8C4 8046:1 39..19 54	0.77	g45126 61	78	289	7.2e- 22	(AC006 931) hypoth etical protei n [Arabi

165461	ATU027 401	79	nap						9	ATL8C2 9572:2 992..8 76	0.69	g33778 16	78	2960	3.5e- 272	etical protei n [Schiz osacch aromyc es pombel] (AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
165462	ATU027 402		nap							ATL8C4 4262:1 646..3 30	0.67	g45860 66	78	1669	7.4e- 182	(AC006 194) putati ve pol polypr oteins, 3' partia l [Arabi dopsis

165463	ATU027 403	ATL8C1 6030:6 08..31 11	nap							ATL8C1 6030:6 08..29 48	0.65	g45570 78	78	2164	4.7e- 217	thalia na] (AC007 045) putati ve Ta11-1 pol polypr otein, 5' partia l [Arabi dopsis thalia na]
165464	ATU027 404	ATL8C2 5167:1 492..1	nap							ATL8C2 5167:1 492..1 42	0.64	g44552 16	78	716	3.0e- 69	(AL035 440) putati ve myb- relate d protei n [Arabi dopsis thalia na]
165465	ATU027 405	ATL8C4 7104:1 267..1 92	nap							ATL8C4 7104:1 201..7 86	0.63	g47739 10	78	113	3.2e- 05	(AF147 259) No defini tion line found [Arabi dopsis thalia

165466	ATU027 406	ATL8C3 2577:1 585..2 494	nap				ATL8C3 2577:1 585..2 359	0.63	g13635 28	78	1245	5.5e- 108	gag protei n - maize [Zea mays]
165467	ATU027 407	ATL8C1 0906:1 ..3573	nap				ATL8C1 0906:1 815..3 573	0.63	g45393 94	78	1245	1.3e- 126	(AL035 526) putati ve protei n [Arabi dopsis thalia na]
165468	ATU027 408	ATL8C8 217:21 28..1	nap				ATL8C8 217:20 48..39 2	0.62	g44163 01	78	2423	9.1e- 206	(AF105 716) gag protei n [Zea mays]
165469	ATU027 409	ATL8C2 1867:1 415..1	nap				ATL8C2 1867:1 415..2 07	0.62	g45858 84	78	462	1.5e- 39	(AC005 850) Hypoth etical protei n [Arabi dopsis thalia na]
165470	ATU027 410	ATL8C2 6244:1 ..2449	nap				ATL8C2 6244:2 57..18 07	0.60	g22450 71	78	2588	6.0e- 223	(Z9734 2) hypoth etical protei n

165479	418	7847:8 85..16 70					7847:8 85..11 80	98				45	018) putati ve zinc finger protei n [Arabi dopsis thalia na]
	ATU027 419	ATL8C1 828:1. .1475	nap				ATL8C1 828:60 ..1466	0.54	1010	78	2.6e- 69		(AL035 394) putati ve recept or kinase [Arabi dopsis thalia na]
165480	ATU027 420	ATL8C2 735:1. .1181	nap				ATL8C2 735:45 8..723	0.53	547	78	2.5e- 43		(AC005 312) putati ve glutat hione s- transf erases [Arabi dopsis thalia na]
165481	ATU027 421	ATL8C1 078:25 97..84	nap				ATL8C1 078:24 03..18 01	0.52	808	78	3.1e- 91		(AC006 220) putati ve transp

165482	ATU027 422	ATL8C8 667:17 79..1	nap					ATL8C8 667:17 79..49	0.51	g43097 04	78	1638	7.5e- 141	oson MuDR protei n [Arabi dopsis thalia na]
165483	ATU027 423	ATL8S2 0131:3 64..1	nap					ATL8S2 0131:3 64..2	0.49	g20766 70	78	165	6.8e- 17	(Z9515 0) hypoth etical protei n Rv3095 [Mycob acteri um tuberc ulosis]
165484	ATU027 424	ATL8C2 96:424 ..1	nap					ATL8C2 96:424 ..55	0.45	g22448 58	78	560	1.8e- 52	(Z9733 7) S- linalo ol syntha se homolo

165485	ATU027 425	ATL8C2 1737:2 15..18 07	nap						ATL8C2 1737:2 15..13 56	0.45	g45809 90	78	870	2.2e- 101	g [Arabi dopsis thalia na] (AF120 335) putati ve transp osase [Arabi dopsis thalia na]
165486	ATU027 426	ATL8C2 127:1. .463	nap						ATL8C2 127:88 ..337	0.45	g48862 86	78	521	2.9e- 36	(AL050 300) putati ve protei n [Arabi dopsis thalia na]
165487	ATU027 427	ATL8C1 5690:1 339..1 750	nap						ATL8C1 5690:1 339..1 743	0.41	g40564 97	78	352	5.4e- 20	(AC005 896) putati ve histon e H2B [Arabi dopsis thalia na]
165488	ATU027 428	ATL8C3 4596:4 89..34 89	nap								g22583 17	78	1453	1.2e- 159	(AF004 879) resist ance comple

165489	ATU027 429	ATL8S1 0068:4 85..47	nap										g10018 03	78	201	1.9e- 09	(D6400 5) hypoth etical protei n [Synec hocyst is sp.]	x protei n I2C- 2 [Lycop ersico n escule ntum]
165490	ATU027 430	ATL8C1 270:51 52..74 91	nap										g47738 81	78	1185	3.3e- 118	(AF076 243) putati ve transp oson protei n [Arabi dopsis thalia na]	
165491	ATU027 431	ATL8S1 362:35 5..631	nap										g40975 87	78	112	1.9e- 09	(U6492 6) NTGP5 [Nicot iana tabacu m]	
165492	ATU027 432	ATL8S7 299:54	nap										g30254 60,	78, 77	180, 119	7.2e- 19,	(U5813 1)	

165493	ATU027 433	ATL8S5 37:172 ..433	nap								g26358 05				3.8e- 07	PhoP [Clost ridium acetob utylic um]; (Z9912 0) simila r to two- compon ent respon se regula tor [Bacil lus subtil is]
165494	ATU027 434	ATL8C4 2340:1 673..6 304	nap								g46999 44	78	138	0.9999 5	7.9e- 07	(M3691 3) cell wall protei n (put.) ; putati ve [Zea mays] (AC007 166) hypothe tical protei n [Arabi

165495	ATU027 435	ATL8C9 392:1. .556	nap									g42621 75	78	351	7.5e- 32	dopsis thalia nal (AC005 508) 12894 [Arabi dopsis thalia nal]
165496	ATU027 436	ATL8C4 9939:4 008..3 228	nap									g22450 40	78	995	2.7e- 69	(Z9734 2) hypoth etical protei n [Arabi dopsis thalia nal]
165497	ATU027 437	ATL8C4 8116:3 71..12 80	nap									g31766 78	78	245	5.8e- 32	(AC003 671) Contai ns simila rity to MYB transc riptio n factor isolog T01024 .1 from A. thalia na BAC gb ACO 02335.

165503	ATU027 443	ATL8C3 8676:1 812..4 54	nap										g31281 72	78	1488	1.8e- 155	sensor y transd uction system [Synec hocyst is sp.] (AC004 521) hypoth etical protei n [Arabi dopsis thalia na]
165504	ATU027 444	ATL8C3 8851:1 162..1	nap										g34829 27	78	116	1.1e- 06	(AC003 970) Unknow n protei n [Arabi dopsis thalia na]
165505	ATU027 445	ATL8C2 1766:1 033..1	nap										g45394 62	78	1725	2.1e- 176	(AL049 500) putati ve protei n [Arabi dopsis thalia na]
165506	ATU027	ATL8C3	nap										g43372	78	532	6.2e-	(AC006

	446	1876:4 835:..1 890									06					38	403) putative replication factor -A protein [Arabidopsis thaliana]
165507	ATU027 447	ATL8C3 395:18 8:..1	nap								g13131 1	78	152			6.5e- 06	CYTOCH ROME B559 ALPHA CHAIN [Triti- cum aestivum]
165508	ATU027 448	ATL8C2 0320:1 ..859	nap								g36876 88	78	174			1.5e- 11	(AF057 027) response regulator protein [Brassica napus]
165509	ATU027 449	ATL8C2 5900:7 31:..1	nap								g41026 90	78	68			0.0004 9	(AF004 806) 24 kDa seed maturation protein

																			n [Glyci ne max]
165510	ATU027 450	ATL8C2 1877:1 462..1	nap											g31842 79	78		922	1.5e- 101	(AC004 136) hypoth etical protei n [Arabi dopsis thalia na]
165511	ATU027 451	ATL8C1 8805:1 067..9 57	nap											g10089 0	78		105	0.0002 4	hypoth etical protei n - maize []
165512	ATU027 452	ATL8C3 0369:1 ..837	nap											g80478 7	78		1097	1.3e- 68	(ML300 2) unknow n protei n [Mus muscul us]
165513	ATU027 453	ATL8S1 6938:1 65..1	nap											g22244	78		91		(X0026 3) uniden tified readin g frame [Zea mays]
165514	ATU027 454	ATL8C1 6685:1	nap											g22447 72	78		1282	2.7e- 138	(Z9733 5)

165515	ATU027 455	..2110	nap										g12834 3	78	482	5.6e- 40	POTENTIAL NITRITE TRANSPORTER [Salmonella typhimurium]	transp ort prote in [Arabi dopsis thalia na]
165516	ATU027 456	ATL8C1 0027:1 ..2430	nap										g45444 02	78	3286		(AC007 047) putative leucine rich repeat protein [Arabi dopsis thalia na]	
165517	ATU027 457	ATL8C1 6787:6 52..13 91	nap										g40068 23	78	106	9.5e- 06	(AC005 970) hypoth etical protein [Arabi dopsis thalia na]	

165518	ATU027 458	ATL8C2 6512:1 986..1	nap							g45811 64	78	1220	8.5e- 130	na] (AC006 220) putati ve polypr oteins [Arabi dopsis thalia na]
165519	ATU027 459	ATL8C3 455:22 99..42 6	nap							g28276 62	78	884	2.1e- 102	(AL021 637) Phosph oribos ylanth ranila te. transf erase [Arabi dopsis thalia na]
165520	ATU027 460	ATL8C4 5121:1 912..2 744	nap							g45394 68	78	382	2.0e- 24	(AL049 500) putati ve protei n [Arabi dopsis thalia na]
165521	ATU027 461	ATL8S1 9371:4 18..1	nap						ATL8S1 9371:4 18..15 3	g11768 35	77	231	7.5e- 19	HYPOTH ETICAL 19.6 KD PROTEI N IN

																MURA- RPN INTERG ENIC REGION PRECUR SOR (F183) [Esche richia coli]
165522	ATU027 462	ATL8S6 606:50 8..1	nap						ATL8S6 606:50 8..56	0.99	g17238 88	77	368			PROBAB LE TRANSC RIPTIO NAL REGULA TORY PROTEI N YGIX [Esche richia coli]
165523	ATU027 463	ATL8C4 3347:1 893..3 00	nap						ATL8C4 3347:1 616..3 00	0.98	g44328 01	77	1142			(AC006 437) unknow n protei n [Arabi dopsis thalia nal]
165524	ATU027 464	ATL8S1 2657:4 5..399	nap						ATL8S1 2657:4 5..350	0.98	g16572 37	77	341	4.8e- 31	(Y0910 2) hypoth etical protei n [Acine]	

165525	ATU027 465	ATL8C2 4025:1 ..892	nap					ATL8C2 4025:1 57..89 2	0.96	g45126 55	77	499	1.0e- 53	tobacter sp. ADP1]
165526	ATU027 466	ATL8C3 5641:1 0656.. 9226	nap					ATL8C3 5641:1 0630.. 9226	0.96	g44552 21	77	1373	9.7e- 120	(AC007 048) putative protein phosphatase 2C [Arabis dopsis thaliana]
165527	ATU027 467	ATL8S2 6021:4 65..13	nap					ATL8S2 6021:2 17..13	0.95	g31525 64	77	459	9.1e- 06	(AC002 986) Contamin similarity to homeob ox protein n 8 gb X16 849 from

165528	ATU027 468	ATL8C1 213:17 07..35 57	nap						ATL8C1 213:17 07..35 44	0.95	g22135 94	77	1195	1.4e- 130	(AC000 348) T7N9.1 4 [Arabi dopsis thalia na]
165529	ATU027 469	ATL8C4 7176:1 ..1440	nap						ATL8C4 7176:6 3..140 1	0.94	g45876 78	77	727	3.7e- 77	(AC007 197) putati ve diseas e resist ance gene, 5, partia l [Arabi dopsis thalia na]
165530	ATU027 470	ATL8C2 318:1. .1064	nap						ATL8C2 318:10 2..106 4	0.92	g49143 30	77	887	2.5e- 93	(AC005 489) F14N23 .16 [Arabi dopsis thalia na]

165531	ATU027 471	ATL8C2 2010:4 71..1	nap				ATL8C2 2010:4 71..16 1	0.90	944068 11	77	522	4.4e- 38	(AC006 201) hypoth etical protei n [Arabi dopsis thalia na]
165532	ATU027 472	ATL8C1 383:13 06..29 6	nap				ATL8C1 383:12 48..38 1	0.88	944671 39	77	848	2.0e- 91	(AL035 540) putati ve protei n phosph atase- 2c [Arabi dopsis thalia na]
165533	ATU027 473	ATL8C4 3572:1 911..3 7	nap				ATL8C4 3572:1 615..3 7	0.87	946462 03	77	1383		(AC007 230) Belong s to PF1000 26 Eukary otic aspart yl protea se family [Arabi dopsis thalia

165534	ATU027 474	ATL8C2 0724:2 398..5 965	nap				ATL8C2 0724:3 634..5 965	0.85	g42630 63	77	1633	6.9e- 138	na] (AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
165535	ATU027 475	ATL8C4 2264:3 8..697	nap				ATL8C4 2264:3 8..571	0.85	g31282 21	77	863	8.0e- 80	(AC004 077) hypoth etical protei n [Arabi dopsis thalia na]
165536	ATU027 476	ATL8C3 7457:1 540..2 44	nap				ATL8C3 7457:1 540..6 37	0.84	g45103 85	77	634		(AC007 017) unknown protei n [Arabi dopsis thalia na]
165537	ATU027 477	ATL8S4 268:46 5..1	nap				ATL8S4 268:41 3..66	0.83	g38605 96	77	285	4.5e- 27	(AJ235 270) unknown [Ricke ttsia prowaz ekil]
165538	ATU027	ATL8S2	nap				ATL8S2	0.81	g35402	77	223	1.3e-	(AC004

165539	478	0108:3 5..603					0108:2 05..45		00		13	260) Simila r to TINY [Arabi dopsis thalia na]
	ATU027 479	ATL8C2 80:144 5..1	nap				ATL8C2 80:144 5..359	0.81	g21911 43	77	1372	2.1e- 140
												(AF007 269) simila r to phosph atidyl inosit ol-4- phosph ate - kinase type II [Arabi dopsis thalia na]
165540	ATU027 480	ATL8C5 0103:6 04..14 92	nap				ATL8C5 0103:6 04..14 92	0.80	g42205 25	77	377	1.8e- 44
												(AL035 356) putati ve tRNA isopen tenylt ransfe rase [Arabi dopsis thalia na]
165541	ATU027 481	ATL8C3 1279:3	nap				ATL8C3 1279:3	0.76	g45389 69	77	328	4.9e- 32
												(AL049 488)

165542	ATU027 482	6..360 9	nap					6..308 9	0.76	g37765 77	77	683		putati ve protei n [Arabi dopsis thalia na]
								ATL8C1 0357:2 152..1 427	ATL8C1 0357:2 096..1 427	g37765 77	77			(AC005 388) T22H22 .24 [Arabi dopsis thalia na]
165543	ATU027 483	ATL8C1 2246:3 135..1 425	nap					ATL8C1 2246:3 134..1 425	0.76	g44328 03	77	1188	3.3e- 112	(AC006 437) putati ve pttA2 protei n [Arabi dopsis thalia na]
165544	ATU027 484	ATL8C3 3781:1 ..1563	nap					ATL8C3 3781:1 16..15 63	0.75	g24627 49	77	999	2.6e- 106	(AC002 292) Putati ve Serine /Threo nine protei n kinase [Arabi dopsis thalia

165545	ATU027 485	ATL8C1 1455:1 ..476	nap				ATL8C1 1455:6 0..408	0.75	g37383 26	77	708	3.7e- 47	na] (AC005 170) putati ve noduli n [Arabi dopsis thalia na]
165546	ATU027 486	ATL8C3 6586:4 716..6 153	nap				ATL8C3 6586:4 716..6 108	0.73	g44552 03	77	843	3.0e- 63	(AL035 440) putati ve protei n [Arabi dopsis thalia na]
165547	ATU027 487	ATL8C3 3824:1 220..8 6	nap				ATL8C3 3824:1 220..8 6	0.70	g44172 85	77	205		(AC007 019) hypoth etical protei n [Arabi dopsis thalia na]
165548	ATU027 488	ATL8C1 6780:3 821..1	nap				ATL8C1 6780:3 821..8 3	0.70	g47339 70, g36953 87	77, 62	155, 2662	4.4e- 16, 4.5e- 218	(AC007 264) hypoth etical protei n [Arabi dopsis thalia na]

165549	ATU027 489	ATL8S9 389:40 2..1	nap						ATL8S9 389:40 2..222	0.70	g35229 54	77	400	1.0e- 25	(AC004 411) IAA20 [Arabi dopsis thalia na]	na]; (AF096 371) contai ns simila rity to repl ication protei n Al [Arabi dopsis thalia na]
165550	ATU027 490	ATL8C1 6591:1 855..1	nap						ATL8C1 6591:1 855..1 8	0.70	g38602 67	77	1490	2.6e- 153	(AC005 824) hypoth etical protei n [Arabi dopsis thalia na]	hypoth etical protei n [Arabi dopsis thalia na]
165551	ATU027 491	ATL8C1 0050:1 383..1 91	nap						ATL8C1 0050:1 083..1 91	0.68	g40391 55	77	441		(AF104 258) putati ve copper - induci	(AF104 258) putati ve copper - induci

165552	ATU027 492	ATL8S3 0006:1 38..57 5	nap						0.66	g29611 76	77	558	3.1e- 47	(AF050 674) riboso mal protei n L27 precu sor [Oryza sativa]	ble 35.6 kDa protei n [Festu ca rubra]
165553	ATU027 493	ATL8C2 4307:1 ..1582	nap						0.66	g31933 02	77	968	3.1e- 97	(AF069 298) contai ns simila rity to a protei n kinase domain (Pfam: pkinas e.hmm, score: 166.20) and to legume lectin s beta	

165554	ATU027 494	ATL8C4 3034:1 084..1	nap							ATL8C4 3034:1 38..40	0.59	g26424 42	77	1503	6.3e- 146	domain (Pfam: lectin _legB. hmm, score: 139.32) [Arabi dopsis thalia na]
165555	ATU027 495	ATL8C2 3301:1 ..699	nap							ATL8C2 3301:1 67..56 0	0.58	g18413 99	77	267	6.7e- 26	(Z3466 1) AtTFII B2 [Arabi dopsis thalia na]
165556	ATU027 496	ATL8C3 3110:1 ..2576	nap							ATL8C3 3110:8 1..242	0.58	g30634 61	77	2550	2.8e- 266	(AC003 981) F22013

165557	ATU027 497	ATL8S2 1257:8 2..577	nap				7	ATL8S2 1257:1 02..50 0	0.58	g21268 50	77	275	1.9e- 25	.23 [Arabi dopsis thalia na] cytoch rome b - Bacill us stearo thermo philus [Bacil lus stearo thermo philus]
165558	ATU027 498	ATL8C1 3556:1 ..1143	nap					ATL8C1 3556:6 15..11 17	0.57	g11725 55	77	276	8.1e- 23	34 KD OUTER MITOCH ONDRIA L MEMBRA NE PROTEI N PORIN (VOLTA GE- DEPEND ENT ANION- SELECT IVE CHANNE L PROTEI N)

165559	ATU027 499	ATL8S7 18:1.. 291	nap							ATL8S7 18:105 ..230	0.56	g28297 57	77	130	7.5e- 09	(VDAC) (POM 34) [Solana um tubero sum]
165560	ATU027 500	ATL8S1 2831:5 43..1	nap							ATL8S1 2831:4 78..12 2	0.56	g14139 7	77	130	7.4e- 10	MITOCH ONDRIA L RIBOSO MAL PROTEI N S12 [Arabi dopsis thalia na]
165561	ATU027 501	ATL8C4 80:135 2..166	nap							ATL8C4 80:124 9..546	0.54	g45394 30	77	202	1.8e- 20	HYPOTH ETICAL OXIDOR EDUCTA SE IN RTP- PELB INTERG ENIC REGION (ORF23 8) [Bacil lus subtil is]
																(AL049 171) putati ve protei n

165562	ATU027 502	ATL8C1 7021:2 750..4 48	nap						ATL8C1 7021:2 453..5 95	0.53	g33778 16	77	2731	5.1e- 244	[Arabi dopsis thalia na] (AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
165563	ATU027 503	ATL8C3 4185:1 ..1267	nap						ATL8C3 4185:2 53..11 13	0.52	g47739 18	77	1423	6.0e- 116	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
165564	ATU027 504	ATL8C4 3189:1 ..2185	nap						ATL8C4 3189:1 08..16 88	0.52	g40380 56	77	3008	6.4e- 304	(AC005 897) putati ve

165565	ATU027 505	ATL8C4 1781:1 1997.. 6960	nap					ATL8C4 1781:1 1997.. 8653	0.49	g43887 19	77	1252	7.6e- 76	transp oson [Arabi dopsis thalia na]
165566	ATU027 506	ATL8C2 1356:1 ..972	nap					ATL8C2 1356:2 35..86 9	0.49	g24648 97	77	275	8.8e- 35	(Z9970 8) putati ve protei n [Arabi dopsis thalia na]
165567	ATU027 507	ATL8C3 5807:1 664..4 77	nap					ATL8C3 5807:1 639..5 30	0.48	g28574 1	77	300	2.3e- 23	(D1455 0) EDGP precu sor [Daucu s carota]
165568	ATU027 508	ATL8C3 2751:1 ..4381	nap					ATL8C3 2751:5 8..413	0.48	g45443 72	77	3097	2.1e- 287	(AC006 920) putati

165569	ATU027 509	ATL8C4 5302:5 00..1	nap						9	ATL8C4 5302:3 10..36	0.47	g41265 02	77	419	6.6e- 39	ve revers e transc riptas e [Arabi dopsis thalia na]
165570	ATU027 510	ATL8C4 8575:1 080..4 71	nap							ATL8C4 8575:1 075..4 71	0.47	g25586 58	77	70	7.6e- 06	(AC002 354) No defini tion line found [Arabi dopsis thalia na]
165571	ATU027 511	ATL8C3 436:33 65..19 1	nap							ATL8C3 436:26 28..19 1	0.42	g43887 19	77	2557	1.2e- 231	(AC006 413) putati ve myosin -like

165572	ATU027 512	ATL8C4 964:30 0..263 9	nap					ATL8C4 964:30 0..253 0	0.42	g45862 58	77	680	3.7e- 72	protein [Arabi dopsis thalia na] (AL049 640) putati ve protein [Arabi dopsis thalia na]
165573	ATU027 513	ATL8C3 2262:3 29..21 89	nap					ATL8C3 2262:3 29..21 40	0.42	g43253 51	77	2697	4.4e- 285	(AF128 394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protein (GB:X5 7297) [Arabi dopsis thalia na]
165574	ATU027 514	ATL8C3 8192:2 42..11 54	nap					ATL8C3 8192:2 42..91 3	0.42	g29822 43	77	113	1.5e- 13	(AF051 204) hypoth etical

165575	ATU027 515	ATL8C1 1947:1 ..1701	nap							g17061 10	77	751	6.4e- 42	NON- GREEN PLASTID TRIOSE PHOSPHATE TRANSL OCATOR PRECUR SOR (CTPT) [Brassic icolerac eal]	prote in [Picea marian al]
165576	ATU027 516	ATL8C2 1882:1 ..1562	nap							g45444 60	77	1098	1.4e- 98	(AC006 592) putati ve revers e transc riptas e [Arabi dopsis thalia na]	
165577	ATU027 517	ATL8C3 7146:2 667..1 693	nap							g31933 15	77	226		(AF069 299) contai ns simila rity	

165578	ATU027 518	ATL8S1 3490:1 ..403	nap										g21209 37	77	258	3.4e- 24	aut protei n - Alcali genes eutrop hus [Alcal igenes eutrop hus]	to transc riptio nal activa tor Ra [Arabi dopsis thalia na]
165579	ATU027 519	ATL8S7 118:57 2..130	nap										g38057 59	77	582	5.2e- 57	(AC005 693) hypoth etical protei n [Arabi dopsis thalia na]	(AC005 693) hypoth etical protei n [Arabi dopsis thalia na]
165580	ATU027 520	ATL8C3 5045:2 430..3 630	nap										g29807 82	77	1328	7.6e- 124	(AL022 198) hypoth etical protei n [Arabi dopsis thalia na]	(AL022 198) hypoth etical protei n [Arabi dopsis thalia na]

165585	524	2112:4 404..5 797									36						41	540) hypoth etical protei n [Arabi dopsis thalia na]
	ATU027 525	ATL8S1 8713:5 65..1	nap								g46618 5	77	265				1.6e- 27	HYPOTH ETICAL 29.6 KD PROTEI N IN RIBT- DACB INTERG ENIC REGION (ORFX7) [Bacil lus subtil is]
165586	ATU027 526	ATL8C1 779:20 41..32 1	nap								g42621 75	77	493				7.5e- 45	(AC005 508) 12894 [Arabi dopsis thalia na]
165587	ATU027 527	ATL8S1 956:60 9..47	nap								g36177 42	77	251				3.3e- 19	(AC005 687) RAP2.6 [Arabi dopsis thalia na]

165588	ATU027 528	ATL8C8 440:78 2..234 3	nap							g44688 04	77	770	1.5e- 74	(AL035 601) putati ve protei n [Arabi dopsis thalia na]
165589	ATU027 529	ATL8C2 4385:6 57..11 2	nap							g47339 99	77	315	3.2e- 24	(AC007 187) hypoth etical protei n [Arabi dopsis thalia na]
165590	ATU027 530	ATL8C3 4229:6 31..1	nap							g42635 41	77	845	3.1e- 68	(AC006 250) putati ve Athila retro element ORF1 protei n [Arabi dopsis thalia na]
165591	ATU027 531	ATL8C2 1923:1 05..57 0	nap							g19441 46	77	169	3.2e- 19	(AB002 589) water- solubu le chloro

165592	ATU027 532	ATL8S2 7486:1 20..47 6	nap										g40565 07	77	175	3.3e- 12	(AC005 896) putati ve RNA bindin g protei n [Arabi dopsis thalia nal]	phyll- protei n [Lepid ium virgin icum]
165593	ATU027 533	ATL8C2 167:11 62..49 8	nap										g48862 86	77	549	1.5e- 46	(AL050 300) putati ve protei n [Arabi dopsis thalia nal]	(AL050 300) putati ve protei n [Arabi dopsis thalia nal]
165594	ATU027 534	ATL8C3 3702:1 ..240	nap										g30435 36	77	194	1.1e- 15	(AB000 708) SAUR [Rapha nus sativu s]	(AB000 708) SAUR [Rapha nus sativu s]
165595	ATU027 535	ATL8C2 1303:1 ..960	nap										g33778 09	77	145	7.5e- 16	(AF075 597) contai ns	(AF075 597) contai ns

																			similarity to SRF-type transcription factors (DNA-binding and dimerization domain)	(PFam: transcribed from actin, score: 15.85)	[Arabidopsis thaliana]	(AL049876)	putative protein [Arabidopsis thaliana]	(AL008967)
165596	ATU027536	ATL8C38144:1157..172	nap					ATL8C38144:912..638	0.96	g4850299	76	620	9.1e-61											
165597	ATU027537	ATL8S19626:5	nap					ATL8S19626:4	0.95	g2624310	76	269	4.5e-20											

165598	ATU027 538	ATL8C8 673:1. .2825	nap				09..46	0.95	g44328 02	76	2954	1.1e- 278	AC006 437) putati ve pol polypr oteins, 5, partia l [Arabi dopsis thalia na]	slrR [Mycob acteri um tuberc ulosis]
165599	ATU027 539	ATL8C3 6286:3 119..1	nap				ATL8C3 6286:3 104..2 82	0.94	g29613 74	76	1901	1.3e- 170	AL022 141) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]	
165600	ATU027 540	ATL8C4 9942:1 763..1	nap				ATL8C4 9942:1 281..4 2	0.93	g45809 90	76	673	3.0e- 64	AF120 335) putati ve transp osase	

165601	ATU027 541	ATL8C3 3394:1 ..878	nap					ATL8C3 3394:7 4..878	0.92	g22450 79	76	558	4.0e- 62	[Arabi dopsis thalia na] (Z9734 3) hypoth etical protei n [Arabi dopsis thalia na]
165602	ATU027 542	ATL8C2 2303:1 4020.. 11798	nap					ATL8C2 2303:1 2499.. 11798, ATL8C2 2303:1 3909.. 12866	0.91, 0.92	g48504 12	76	2782	1.3e- 289	(AC007 288) putati ve MuDR MURA transp osase [Arabi dopsis thalia na]
165603	ATU027 543	ATL8S9 22:752 ..1	nap					ATL8S9 22:551 ..17	0.91	g39257 03	76	588	1.0e- 59	(X9590 5) 14- 3-3 protei n [Lycop ersico n escule ntum]
165604	ATU027 544	ATL8C9 777:33 82..60 1	nap					ATL8C9 777:28 34..60 1	0.90	g85739 7	76	746	5.7e- 48	(D5087 0) mitoti c

165605	ATU027 545	ATL8C2 2858:6 645..2 770	nap					ATL8C2 2858:6 447..4 256	0.89			g44328 07, g44328 00	76, 53	2955, 164	1.1e- 303, 3.6e- 12	cyclin a2- type [Glyci ne max] (AC006 570) putati ve polypr oteins [Arabi dopsis thalia na]; (AC006 437) putati ve univer sal minici rcle sequen ce bindin g protei n [Arabi dopsis thalia na]
165606	ATU027 546	ATL8C2 2166:2 52..86 1	nap					ATL8C2 2166:2 52..60 4	0.88			g31829 22	76	126	1.5e- 08	ADP- RIBOSY LATION FACTOR 1 [Brass

165607	ATU027 547	ATL8C3 2842:3 233..7 5	nap					ATL8C3 2842:3 233..7 5	0.88	g21911 95	76	1955	7.7e- 201	ica rapa] (AF007 271) contai ns simila rity to T. cruzi 3' end fragme nt (PID:g 161956) [Arabi dopsis thalia nal]
165608	ATU027 548	ATL8S1 4622:3 85..1	nap					ATL8S1 4622:1 74..7	0.85	g54422 6	76	173	1.2e- 13	EBSC PROTEI N [Enter ococcu s faecal is]
165609	ATU027 549	ATL8C1 3652:2 000..1 521	nap					ATL8C1 3652:1 953..1 521	0.82	g45235 7	76	637	7.1e- 63	(Z2959 1) guanin e nucleo tide regula tory protei n [Vicia fabal]

165610	ATU027 550	ATL8C1 4879:1 ..2297	nap				ATL8C1 4879:5 5..214 4	0.81	944173 09	76	2778	1.3e- 282	(AC006 446) putati ve pol ypr ote in with a revers e transc riptas e domain [Arabi dopsis thalia na]
165611	ATU027 551	ATL8S4 106:73 0..1	nap				ATL8S4 106:50 6..45	0.80	g14083 9, g26458 61	76, 65	145, 392	6.6e- 10, 1.0e- 27	INSERT ION ELEMEN T IS407 HYPOTH ETICAL 10.0 KD PROTEI N (ORF4) [Inser tion sequen ce IS407] ; (AF034 211) transp osase OrfB

165612	ATU027 552	ATL8C2 7318:4 219..4 19	nap				ATL8C2 7318:3 865..4 19	0.80	g24659 23	76	1226	[Desul fovir is vulgar is]
165613	ATU027 553	ATL8C2 3203:4 86..17 17	nap				ATL8C2 3203:4 86..17 17	0.79	g49143 30	76	886	(AC005 489) F14N23 .16 [Arabi dopsis thalia na]
165614	ATU027 554	ATL8C1 2203:1 415..1	nap				ATL8C1 2203:1 415..1 99	0.76	g26897 20	76	822	(AF037 168) DnaJ homolo gue [Arabi dopsis thalia na]
165615	ATU027 555	ATL8C3 302:22 86..1	nap				ATL8C3 302:22 01..23	0.76	g45860 66	76	1783	(AC006 194) putati

165619 165620 165621 165622

165619	ATU027 559	ATL8C4 874:18 71..63 4	nap					ATL8C4 874:17 42..74 9	0.72	g47739 18	76	1611	1.2e- 145	thalia na] (AF147 259) No defini tion line found [Arabi dopsis thalia na]
165620	ATU027 560	ATL8C3 9869:1 123..5 04	nap					ATL8C3 9869:8 57..50 4	0.70	g24594 33	76	581	5.6e- 40	(AC002 332) hypoth etical protei n [Arabi dopsis thalia na]
165621	ATU027 561	ATL8C1 189:41 2..178 3	nap					ATL8C1 189:41 2..167 8	0.69	g49144 63	76	645	2.2e- 56	(AL050 400) putati ve protei n [Arabi dopsis thalia na]
165622	ATU027 562	ATL8C1 4416:1 413..2 15	nap					ATL8C1 4416:1 054..3 59	0.69	g38343 19	76	723	2.5e- 71	(AC005 679) Simila r to [Arabi dopsis thalia na]

165623	ATU027 563	ATL8C3 4936:3 258..5 288	nap				ATL8C3 4936:3 258..5 189	0.68	g13089 7	76	391	1.6e- 22	na] DNA PRIMAS E SMALL SUBUNI T (DNA PRIMAS E 49 KD SUBUNI T) (P49) [Mus muscul us]
165624	ATU027 564	ATL8C4 3977:1 ..1551	nap				ATL8C4 3977:1 41..15 51	0.67	g32362 53	76	1033		(AC004 684) recept or- like protei n kinase [Arabi dopsis thalia na]
165625	ATU027 565	ATL8C3 2808:1 ..1070	nap				ATL8C3 2808:7 39..10 70	0.66	g45672 95	76	1155	2.3e- 99	(AC006 918) putati ve pol polypr otein [Arabi dopsis thalia na]
165626	ATU027 566	ATL8S4 637:30	nap				ATL8S4 637:26	0.66	g30972 60	76	87	1.4e- 07	(AJ005 741)

165627	ATU027 567	ATL8C3 4565:9 51..1	nap				3..9	0.66	g45859 64	76	120	4.7e- 09	self- incomp atibil ity [Papav er rheas]
165628	ATU027 568	ATL8C4 4691:1 412..1	nap				ATL8C4 4691:1 412..1 13	0.64	g48862 86	76	407	1.1e- 34	(AL050 300) putati ve protei n [Arabi dopsis thalia na]
165629	ATU027 569	ATL8C1 8223:5 29..1	nap				ATL8C1 8223:4 10..15 1	0.62	g40380 66	76	460	3.0e- 20	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
165630	ATU027 570	ATL8C1 9276:3	nap				ATL8C1 9276:3	0.62	g38941 57	76	1013	2.6e- 99	(AC005 312)

165631	ATU027 571	18..37 48	nap				18..35 17	0.60	g36953 82	76	1046	1.le- 105	putative protein kinase , 3' partial [Arabidopsis thaliana]
													(AF096 370) contains similarity to Arabidopsis thaliana retrotransposon Tall-1 (GB:L4 7193) [Arabidopsis thaliana]
165632	ATU027 572	ATL8S1 0406:3 5..704	nap				ATL8S1 0406:4 4..538	0.60	g48865 53	76	629	4.le- 60	(Y1852 7) pobR regulator [Pseudomonas]

165633	ATU027 573	ATL8C2 4123:2 434..1	nap				ATL8C2 4123:2 333..4 9	0.59	g45899 61	76	518	8.1e- 53	sp.] (AC007 169) unknown protein [Arabi dopsis thalia na]
165634	ATU027 574	ATL8C2 6691:9 77..1	nap				ATL8C2 6691:8 13..38 8	0.58	g32818 62	76	319	1.6e- 38	(AL031 004) putati ve protei n [Arabi dopsis thalia na]
165635	ATU027 575	ATL8C1 7993:4 50..39 44	nap				ATL8C1 7993:4 50..37 85	0.57	g45860 66	76	2604		(AC006 194) putati ve pol ypr oteins, 3', partia l [Arabi dopsis thalia na]
165636	ATU027 576	ATL8C1 464:12 10..1	nap				ATL8C1 464:10 96..82	0.55	g17698 97	76	478	8.0e- 39	(Y0801 0) lectin recept or kinase

165637	ATU027 577	ATL8C7 29:639 .1	nap					ATL8C7 29:639 ..28	0.54	g40975 61	76	406	6.6e- 46	(U6491 8) ATGP1 [Arabi dopsis thalia na]
165638	ATU027 578	ATL8C4 1062:1 45..24 17	nap					ATL8C4 1062:1 45..24 00	0.54	g42630 63	76	1543	3.3e- 140	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
165639	ATU027 579	ATL8C4 6252:4 08..1	nap					ATL8C4 6252:3 31..76	0.53	g45804 74	76	587	1.3e- 51	(AC006 081) putati ve pathog enesis - relate d protei n; simila r to PR-1 [Arabi dopsis thalia na]
165640	ATU027	ATL8C1	nap					ATL8C1	0.52	g23175	76	471	8.3e-	CAFFE1

	580	8811:1 61..11 74					8811:2 30..11 25			7				37	C ACID 3-O- METHYL TRANSF ERASE (S- ADENOS YSL-L- METHIO NINE:C AFFEIC ACID 3-O- METHYL TRANSF ERASE) (COMT) [Popul us tremul oides]
165641	ATU027 581	ATL8C3 7774:3 31..13 85	nap				ATL8C3 7774:3 31..79 8	0.51	g45859 93	76	453	9.2e- 40	(AC005 287) Simila r to serine /threo nine kinase s [Arabi dopsis thalia na]		
165642	ATU027 582	ATL8C4 1955:2 96..13 89	nap				ATL8C4 1955:4 44..12 41	0.49	g31525 75	76	692	6.0e- 73	(AC002 986) Simila r to cytoch rome		

165643	ATU027 583	ATL8C2 3956:2 824..4 78	nap						0.48	g45585 58	76	939	3.5e- 97	(AC007 138) putati ve polyga lactur onidas e [Arabi dopsis thalia na]	P450ty r gb U32 624 from Sorghu m bicolo r. Gene is cut off at exon 3. [Arabi dopsis thalia na]
165644	ATU027 584	ATL8S9 459:1. .707	nap						0.47	g54870 2	76	213	2.0e- 19	DNA- DIRECT ED RNA POLYME RASE II 14.5 KD POLYPE PTIDE	

165645	ATU027 585	ATL8C1 6724:2 228..1	nap						ATL8C1 6724:2 056..3 9	0.46		g10766 85, g22621 67	76, 65	461, 754	9.4e- 41, 9.0e- 65	(RPB9) (RPB14 .5) [Homo sapien s]
165646	ATU027 586	ATL8S1 0949:1 ..471	nap						ATL8S1 0949:7 4..378	0.44		g15506 57	76	481	7.4e- 26	(Z8022 6) hypoth etical protei n Rv0779 c [Mycob acteri um tuberc ulosis

165647	ATU027 587	ATL8C4 6542:1 574..1	nap				ATL8C4 6542:1 238..1 02	0.42	g21911 60	76	854	2.7e- 89] (AF007 270) Simila r to pectin esterase [Arabi dopsis thalia na]
165648	ATU027 588	ATL8S1 474:46 5..214	nap						g26725 2	76	205	1.9e- 16	EXCINU CLEASE ABC SUBUNI T A [Parac occus denitr ifican s]
165649	ATU027 589	ATL8C3 9974:1 021..2 95	nap						g46782 07	76	868	2.5e- 81	(AC007 134) putati ve revers e transc riptase [Arabi dopsis thalia na]
165650	ATU027 590	ATL8C4 7460:1 073..1 69	nap						g45672 53	76	897	1.2e- 90	(AC007 070) putati ve serpin

165651	ATU027 591	ATL8C2 8938:1 ..533	nap										g31933 15	76	346	3.5e- 24	(AF069 299) contai ns simila rity to transc riptio nal activa tor Ra [Arabi dopsis thalia na]	protei n [Arabi dopsis thalia na]
165652	ATU027 592	ATL8C7 013:1. .1090	nap										g43357 50	76	319	5.7e- 30	(AC006 284) putati ve beta- 1,3- endogl ucanas e [Arabi dopsis thalia na]	putati ve beta- 1,3- endogl ucanas e [Arabi dopsis thalia na]
165653	ATU027 593	ATL8C1 2209:5 838..1 988	nap										g45393 94	76	859	2.9e- 94	(AL035 526) putati ve protei	putati ve protei

165654	ATU027 594	ATL8C2 743:1. .1184	nap										76	1133	8.3e- 102	n [Arabi dopsis thalia na] (AC006 918) putati ve Athila retroeo lement ORF1 protei n [Arabi dopsis thalia na]
165655	ATU027 595	ATL8C4 8427:4 173..5 831	nap										76	77	0.996	SUPPRE SSOR PROTEI N SRP40 [Saech aromyc es cerevi siae]
165656	ATU027 596	ATL8C2 9236:2 590..6 11	nap										76	1238	3.1e- 95	(AC006 304) putati ve revers e transc riptas e [Arabi dopsis

165657	ATU027 597	ATL8C4 5258:1 048..1 856	nap											g44552 97	76	547	5.7e- 63	thalia na] (AL035 528) hypoth etical protei n [Arabi dopsis thalia na]
165658	ATU027 598	ATL8C9 130:12 4..161 7	nap											g42637 73	76	1439		(AC006 218) hypoth etical protei n [Arabi dopsis thalia na]
165659	ATU027 599	ATL8C2 4883:1 ..1912	nap											g47739 20	76	2390	9.9e- 245	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]
165660	ATU027 600	ATL8C4 4779:8 55..16 3	nap											g32506 79	76	884	3.0e- 71	(AL024 486) putati ve protei n [Arabi

165676	ATU027 616	ATL8S1 7147:1 ..503	nap						ATL8S1 7147:8 3..480	0.99	g17100 73	75	236	4.2e- 23	oxidoreductase [Schizosaccharomyces pombe] DNA REPAIR PROTEIN RECOGNITION HOMOLOG [Coxiella burnetii]
165677	ATU027 617	ATL8C4 0895:6 23..1	nap						ATL8C4 0895:6 23..327	0.99	g12201 80	75	152	8.8e- 12	(Z69996) dormancy related protein [Trollius ledeborii]
165678	ATU027 618	ATL8S1 1709:1 ..599	nap						ATL8S1 1709:1 44..562	0.98	g17100 26	75	311	7.1e- 30	RAS-RELATED PROTEIN RAB-4B [Rattus norvegicus]

165679	ATU027 619	ATL8C2 9021:1 ..709	nap				ATL8C2 9021:7 2..662	-0.97	g58556 5	75	265	2.2e- 32	RIBOSO ME RECYCL ING FACTOR HOMOLO G (NUCLE AR LOCATE D PROTEI N D2) [Daucu s carota]
165680	ATU027 620	ATL8S2 1101:5 57..1	nap				ATL8S2 1101:4 65..91	0.96	g12375 6	75	773	1.8e- 74	HISTID INE UTILIZ ATION REPRES SOR [Pseud omonas putida]
165681	ATU027 621	ATL8C1 2982:1 ..3346	nap				ATL8C1 2982:8 1..306 3	0.94	g48504 04	75	4055	0.0	(AC007 357) Simila r to gb AF0 38007 FIC1 gene from Homo sapien s and is a

165684	ATU027 624	ATL8C1 9856:1 770..3 145	nap					ATL8C1 9856:1 770..3 024	0.89	g18257 66	75	209	1.5e- 15	dopsis thalia nal (U8831 4) simila r to flavin - contai ning monoox ygenas es [Caeno rhabdi tis elegan s]
165685	ATU027 625	ATL8C2 723:18 71..39 12	nap					ATL8C2 723:24 30..38 50	0.89	g44173 07	75	862	1.3e- 89	(AC006 446) putati ve pol polypr oteins [Arabi dopsis thalia nal]
165686	ATU027 626	ATL8S2 6022:1 31..47 7	nap					ATL8S2 6022:1 37..44 0	0.89	g10767 86	75	362	2.2e- 07	hypoth etical protei n 1 - perenn ial teosin te [Zea diplop erenni

165687	ATU027 627	ATL8C1 2399:1 ..2164	nap				ATL8C1 2399:9 8..216 4	0.88	g45858 79	75	1824	6.0e- 151	s] (AC005 850) Highly Similil ar to Mlo protei ns [Arabi dopsis thalia na]
165688	ATU027 628	ATL8C2 830:1. .1432	nap				ATL8C2 830:52 ..1366	0.86	g22135 81	75	909	3.7e- 101	(AC000 348) T7N9.1 [Arabi dopsis thalia na]
165689	ATU027 629	ATL8C7 820:11 36..24 42	nap				ATL8C7 820:11 36..23 14	0.83	g45126 52	75	1154	1.7e- 56	(AC007 048) hypoth etical protei n [Arabi dopsis thalia na]
165690	ATU027 630	ATL8C3 338:1. .909	nap				ATL8C3 338:57 ..909	0.83	g34510 70	75	120	3.3e- 10	(AL031. 326) putati ve protei n [Arabi dopsis thalia na]

165691	ATU027 631	ATL8S1 9014:6 3..670	nap			ATL8S1 9014:3 01..35 3	0.82	g17238 82	75	244	1.8e- 22	HYPOTH ETICAL 29.9 KD PROTEI N IN TOLC- RIBB INTERG ENIC REGION (ORFC) (F271) [Esche richia coli]
165692	ATU027 632	ATL8S6 369:1. .375	nap			ATL8S6 369:11 8..375	0.78	g11734 60	75	225		SMALL PROTEI N B HOMOLO G [Strep tococc us faecal is]
165693	ATU027 633	ATL8S8 156:1. .434	nap			ATL8S8 156:11 1..417	0.78	g38508 38	75	171	5.4e- 16	(AJ012 480) hypoth etical protei n [Pseud omonas mendoc ina]
165694	ATU027 634	ATL8C4 0002:4 03..7	nap			ATL8C4 0002:4 03..12 5	0.77	g25831 16	75	182	5.1e- 13	(AC002 387) unknown

165695	ATU027 635	ATL8C8 584:29 13..17 56	nap					ATL8C8 584:28 22..17 56	0.74	g45444 20, g33778 45	75, 72	833, 309	1.1e- 78, 1.5e- 30	protein [Arabi dopsis, thalia na]
														AC006 955) hypoeth etical protein [Arabi dopsis thalia na]; (AF076 274) contains similarity to the basic region plus leucine zipper transcription factor s (Pfam: bZIP.h mm, score: 12.77) [Arabi dopsis

165696	ATU027 636	ATL8C1 6838:4 24..23 33	nap				ATL8C1 6838:4 25..21 98	0.74	g14953 66	75	1060	3.6e- 105	(Z6937 0) nitrite transporter [Cucumis sativus]
165697	ATU027 637	ATL8C3 1440:1 182..1	nap				ATL8C3 1440:1 107..7 6	0.73	g28646 26	75	1136	1.5e- 110	(AL021 811) cytochrome p450 - like protein [Arabidopsis thaliana]
165698	ATU027 638	ATL8C1 7652:4 821..3 865	nap				ATL8C1 7652:4 821..3 878	0.71	g45726 75	75	296	2.5e- 21	(AC006 954) unknown protein [Arabidopsis thaliana]
165699	ATU027 639	ATL8C2 7035:1 ..1874	nap				ATL8C2 7035:4 63..13 17	0.71	g45444 50	75	727	5.6e- 77	(AC006 592) hypothetical protein

165700	ATU027 640	ATL8C3 9003:4 11..11 10	nap				ATL8C3 9003:7 88..10 75	0.70	g30803 60	75	503	6.0e- 54	[Arabi dopsis thalia na] (AL022 580) hypoth etical protei n [Arabi dopsis thalia na]
165701	ATU027 641	ATL8C5 90:1.. 1020	nap				ATL8C5 90:179 ..865	0.69	g40564 18	75	364	1.7e- 38	(AC005 322) T7A14. 5 [Arabi dopsis thalia na]
165702	ATU027 642	ATL8C2 2238:1 45..16 86	nap				ATL8C2 2238:1 45..12 82	0.68	g42630 62	75	191	1.2e- 17	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
165703	ATU027 643	ATL8C3 9114:5 67..1	nap				ATL8C3 9114:5 67..18 2	0.68	g48182 8	75	238	3.9e- 18	5B protei n - tomato [Lycop ersico n]

165704	ATU027 644	ATL8C4 7349:7 57..82	nap				ATL8C4 7349:6 77..88	0.66	g45862 52	75	646	3.4e- 57	(AL049 640) hypoth etical protein [Arabi dopsis thalia na]
165705	ATU027 645	ATL8C1 6880:1 114..6 96	nap				ATL8C1 6880:9 57..69 6	0.66	g25296 74	75	560	1.9e- 54	(AC002 535) hypoth etical protein [Arabi dopsis thalia na]
165706	ATU027 646	ATL8C3 3747:1 233..1	nap				ATL8C3 3747:1 110..1 72	0.66	g31842 81	75	1300	7.6e- 129	(AC004 136) putati ve cytoch rome P450 [Arabi dopsis thalia na]
165707	ATU027 647	ATL8C4 9844:1 ..875	nap				ATL8C4 9844:7 0..875	0.65	g38057 63	75	452	1.1e- 43	(AC005 693) hypoth etical protein [Arabi

165708	ATU027 648	ATL8C3 9537:1 842..2 8	nap					ATL8C3 9537:1 537..2 8	0.63	g43143 83	75	777	1.5e- 67	dopsis thalia na] (AC006 232) hypo- thetical protein [Arabi dopsis thalia na]
165709	ATU027 649	ATL8C2 3173:1 311..6 1	nap					ATL8C2 3173:1 278..8 4	0.63	g13518 34	75	490	5.9e- 52	PROBAB LE ATP- DEPEND ENT TRANSP ORTER YCF16 [Cyano phora parado xa]
165710	ATU027 650	ATL8C1 6993:1 ..829	nap					ATL8C1 6993:4 6..829	0.63	g33373 59	75	685	7.0e- 83	(AC004 481) hypo- thetical protein [Arabi dopsis thalia na]
165711	ATU027 651	ATL8C1 5605:8 47..1	nap					ATL8C1 5605:8 47..29	0.62	g37790 27	75	151	2.3e- 06	(AC005 171) hypo- thetical protein

165712	ATU027 652	ATL8C1 0708:4 38..17 03	nap						ATL8C1 0708:4 38..16 84	0.61	g31352 74	75	1767	1.5e- 174	n [Arabi dopsis thalia na] (AC003 058) putati ve beta- 1,3- endogl ucanas e [Arabi dopsis thalia na]
165713	ATU027 653	ATL8S6 097:53 3..1	nap						ATL8S6 097:44 1..17	0.61	g11631 23	75	276	4.1e- 19	(U4353 7) membra ne protei n involv ed in mithra mycin resist ance [Strep tomyce s argill aceus]
165714	ATU027 654	ATL8C3 8293:1 843..1	nap						ATL8C3 8293:1 843..7 01	0.59	g48368 79	75	1105	1.9e- 113	(AC007 260) lcl pr t_seq No

165715	ATU027 655	ATL8C1 1696:1 441..8	nap					ATL8C1 1696:1 258..8	0.59		g37023 24	75	305	4.9e- 36	(AC005 397) hypoth etical protei n [Arabi dopsis thalia nal]
165716	ATU027 656	ATL8C3 2822:1 ..1870	nap					ATL8C3 2822:2 22..12 98	0.58		g26513 10, g41028 39	75, 65	546, 534	5.8e- 53, 7.3e- 51	(AC002 336) putati ve PTR2-B peptid e transp orter [Arabi dopsis thalia nal]; (AF016 713) LeOPT1 [Lycop ersico n escule ntum]
165717	ATU027	ATL8C1	nap					ATL8C1	0.56		g42622	75	778	5.0e-	(AC006

657	4726:1 173..2 871				4726:1 173..2 871	10				77	161) simila r to leucin e zipper transc riptio n factor [Arabi dopsis thalia na]
165718	ATU027 658	ATL8C4 8535:1 387..6 71	nap		ATL8C4 8535:1 031..6 71	0.53	g37023 18	75	463	4.1e- 31	(AC005 397) putati ve Ap2 domain protei n [Arabi dopsis thalia na]
165719	ATU027 659	ATL8C1 2516:8 75..1	nap		ATL8C1 2516:8 64..10	0.51	g39245 97	75	554	1.9e- 60	(AF069 442) putati ve oxidor educta se [Arabi dopsis thalia na]
165720	ATU027 660	ATL8C2 9503:2 531..1	nap		ATL8C2 9503:2 029..6 85	0.51	g30333 91	75	752	7.6e- 50	(AC004 238) putati ve

165721	ATU027 661	ATL8S2 9414:9 ..538	nap					ATL8S2 9414:1 37..44 0	0.51			g30245 23, g11728 99	75, 71	234, 189	2.4e- 23, 2.7e- 17	RECOMB INATIO N PROTEI N RECR [Synec hocyst is sp.]; RECOMB INATIO N PROTEI N RECR [Haemo philus influe nzae Rd]	amino acid transp orter [Arabi dopsis thalia na]
165722	ATU027 662	ATL8C4 6313:4 40..13 11	nap					ATL8C4 6313:7 90..12 73	0.49			g34260 40	75	549	3.7e- 59	(AC005 168) hypoth etical protei n [Arabi dopsis thalia na]	
165723	ATU027 663	ATL8C8 205:1. .5115	nap					ATL8C8 205:76 ..5115	0.48			g39288 62	75	1426	1.5e- 155	(AF089 710) diseas	

165724	ATU027 664	ATL8C8 742:14 70..1	nap						ATL8C8 742:12 82..19 5	0.46	g45444 29	75	2646	1.4e- 259	(AC006 955) putati ve zinc- finger protei n [Arabi dopsis thalia na]	e resist ance protei n RPP8 [Arabi dopsis thalia na]
165725	ATU027 665	ATL8C2 4639:8 51..17 15	nap						ATL8C2 4639:9 35..17 08	0.44	g45394 30	75	352	4.1e- 37	(AL049 171) putati ve protei n [Arabi dopsis thalia na]	(AL049 171) putati ve protei n [Arabi dopsis thalia na]
165726	ATU027 666	ATL8C4 826:66 9..143	nap						ATL8C4 826:66 7..166	0.42	g42630 50	75	342	2.3e- 36	(AC005 142) putati ve noduli n [Arabi dopsis thalia na]	(AC005 142) putati ve noduli n [Arabi dopsis thalia na]

165727	ATU027 667	ATL8C4 2339:4 13..59 27	nap				ATL8C4 2339:4 13..58 61	0.41	g36953 97	75	1625	1.2e- 150	na] (AF096 372) No. defini tion line found [Arabi dopsis thalia na]
165728	ATU027 668	ATL8C4 2869:2 849..6 001	nap				ATL8C4 2869:2 861..6 001	0.40	g42638 30	75	2176	2.4e- 172	(AC006 067) hypoth etical protei n [Arabi dopsis thalia na]
165729	ATU027 669	ATL8C6 864:12 8..874	nap						g31223 57	75	1187	5.9e- 123	PUTATI VE LIPOAT E- PROTEI N LIGASE B (LIPOA TE BIOSYN THESIS PROTEI N B) [Arabi dopsis thalia na]

165730	ATU027 670	ATL8C4 9105:1 170..3 29	nap						947538 89	75	659	2.0e- 62	(AJ005 761) Tpv2- 1c [Phase olus vulgar is]
165731	ATU027 671	ATL8C1 8928:2 58..1	nap						g38108 94	75	214	1.1e- 14	(AB016 766) transc riptio n antite rminat ion protei n [Vibri o algino lyticu s]
165732	ATU027 672	ATL8C2 6522:3 292..5 98	nap						g23927 64	75	487	9.6e- 38	(AC002 534) hypoth etical protei n [Arabi dopsis thalia na]
165733	ATU027 673	ATL8S1 8342:5 06..22 7	nap						g32942 46	75	92	0.0001 3	(AL031 031) putati ve transc riptio nal

165740	679	545:1. .2101								64					124	220) putati ve polypr otein [Arabi dopsis thalia na]
	ATU027 680	ATL8C8 558:44 49..30 22	nap							g42638 29, g19463 55	75, 38	71, 312			0.042, 7.4e- 20	(AC006 067) hypoth etical protei n [Arabi dopsis thalia na]; (U9321 5) maize transp oson MuDR mudrA protei n isolog [Arabi dopsis thalia na]
165741	ATU027 681	ATL8C1 1242:1 748..3 442	nap							g26492 81	75	987			1.8e- 83	(AE001 014) cell divisi on contro l

165742	ATU027 682	ATL8C8 714:14 18..50 2	nap							g44903 39	75	206	7.8e- 23	(AL035 656) putati ve protei n [Arabi dopsis thalia nal
165743	ATU027 683	ATL8C1 5786:1 162..5 50	nap							g31933 12	75	576	6.7e- 46	(AF069 299) No defini tion line found [Arabi dopsis thalia nal
165744	ATU027 684	ATL8C4 6772:7 00..1	nap							g19463 76	75	191	1.8e- 08	(U9321 5) unknow n protei n [Arabi dopsis

[illegible]

165748	ATU027 688	ATL8C1 2134:8 33..47 7	nap									g22447 36	75	282	2.2e- 25	(D8841 5) expans in [Gossy pium hirsut um]	RGA- like [Arabi dopsis thalia na]
165749	ATU027 689	ATL8C3 2666:2 324..6 19	nap									g28276 62	75	2339	1.7e- 232	(AL021 637) Phosph oribos ylanth ranila te transf erase [Arabi dopsis thalia na]	
165750	ATU027 690	ATL8C1 5268:1 ..413	nap									g46462 20	75	418	8.7e- 28	(AC007 290) hypoth etical protei n [Arabi dopsis thalia na]	
165751	ATU027 691	ATL8C1 4779:4 45..15	nap									g11757 22	75	198	8.2e- 15	HYPOTH ETICAL 14 KD	

165752	ATU027 692	3	ATL8C1 9451:1 731..1	nap									g22450 09	75	1770	5.0e- 185	PROTEI N IN TRNI INTRON (ORF 134) [Zea mays]
165753	ATU027 693		ATL8S1 5571:7 39..1	nap									g48743 07	75	142	3.6e- 16	(Z9734 1) hypoth etical protei n [Arabi dopsis thalia na]
165754	ATU027 694		ATL8C2 3442:2 009..1	nap									g42638 30	75	1878	4.3e- 140	(AC006 067) hypoth etical protei n [Arabi dopsis thalia na]
165755	ATU027 695		ATL8S1 5098:1	nap									g29525 43	74	797	1.0e- 78	(AF051 939) hypoth etical protei n [Arabi dopsis thalia na]

	702	0699:1 009...3 13							38				74	292) simila r to
165763	ATU027 703	ATL8S1 3709:1 59..67 0	nap					ATL8S1 3709:1 59..65 0	0.99	g18773 69	74	327	8.6e- 32	(Z9277 2) echA3 [Mycob acteri um tuberc ulosis]
165764	ATU027 704	ATL8C1 0297:8 226..6 050	nap					ATL8C1 0297:8 164..6 089	0.98	g48504 12	74	2792		(AC007 288) putati ve MuDR MURA transp osase [Arabi dopsis thalia na]
165765	ATU027 705	ATL8C1 8289:1 080..1	nap					ATL8C1 8289:9 84..16 2	0.97	g22621 59	74	369	3.1e- 35	(AC002 329) predic ted protei n simila r to S.pomb e protei n C5H10. 03 [Arabi dopsis

165766	ATU027 706	ATL8C2 3645:1 549..6 06	nap					ATL8C2 3645:1 370..6 06	0.97	g34200 49	74	833	1.8e- 88	thalia na] (AC004 680) putati ve protei n phosph atase 2C [Arabi dopsis thalia na]
165767	ATU027 707	ATL8C4 0845:1 163..4 0	nap					ATL8C4 0845:1 093..8 2	0.96	g34513 92	74	758	1.3e- 84	(AJ001 264) mitoch ondria l uncoup ling protei n [Arabi dopsis thalia na]
165768	ATU027 708	ATL8C3 2263:1 ..1599	nap					ATL8C3 2263:1 66..13 64	0.94	g16660 96	74	316	1.2e- 35	(Y0911 3) dioxyg enase [Marah macro arpus]
165769	ATU027 709	ATL8C4 944:34 35..39 5	nap					ATL8C4 944:33 42..20 10	0.93	g42204 58, g20621 67	74, 32	1262, 43	2.7e- 111, 0.012	(AC006 216) Simila r to [Arabi

165770	ATU027 710	ATL8C4 9274:1 ..1251	nap							ATL8C4 9274:1 008..1 133	0.91	g43357 21	74	535	6.0e- 63	dopsis thalia nal; (AC001 645) Prolin e-rich protei n APG isolog [Arabi dopsis thalia nal] (AC006 248) putati ve zinc- finger protei n [Arabi dopsis thalia nal]
165771	ATU027 711	ATL8C3 2850:1 430..2 11	nap							ATL8C3 2850:1 430..2 13	0.91	g42637 68	74	992	2.5e- 105	(AC006 218) hypoth etical protei n [Arabi dopsis thalia nal]
165772	ATU027 712	ATL8C4 4883:6 10..19 31	nap							ATL8C4 4883:8 38..19 31	0.90	g42622 10	74	1252	2.3e- 124	(AC006 161) simila r to

165773	ATU027 713	ATL8C4 8170:1 ..1188	nap						ATL8C4 8170:6 9..118 8	0.90	g40391 55	74	334	4.9e- 21	leucin e zipper transc riptio n factor [Arabi dopsis thalia na]
165774	ATU027 714	ATL8C1 0512:2 852..2 046	nap						ATL8C1 0512:2 703..2 046	0.90	g47340 14	74	421		(AF104 258) putati ve copper - induci ble 35.6 kDa protei n [Festu ca rubra]
165775	ATU027 715	ATL8C1 0262:1 ..2649	nap						ATL8C1 0262:1 04..26 49	0.89	g45899 62	74	941		(AC007 169) putati ve

165776	ATU027 716	ATL8C4 1830:5 65..1	nap							0.89	g17551 62	74	414	3.9e- 41	fructo kinase [Arabi dopsis thalia na]
															(U7519 2) germin -like protei n [Arabi dopsis thalia na]
165777	ATU027 717	ATL8C1 254:18 7..504 1	nap							0.87	g54181 6	74	315	7.9e- 25	protei n kinase - common ice plant [Mesem bryant hemum crysta llinum]
165778	ATU027 718	ATL8C4 5059:1 ..3740	nap							0.87	g28798 07, g21314 17	74, 69	247, 578	2.3e- 21, 4.2e- 50	(AL021 813) putati ve dna helica se [Schiz osacch aromyc es pombe]

165779	ATU027 719	ATL8C1 0425:9 81..1	nap						ATL8C1 0425:9 81..29 4	0.86	g46894 52	74	280		hypothetical protein YDR291w - yeast (Saccharomyces cerevisiae) [Saccharomyces cerevisiae]
165780	ATU027 720	ATL8C3 6736:9 10..1	nap						ATL8C3 6736:7 13..39	0.85	g44328 49	74	1421	6.8e-147	(AC006300) hypothetical protein [Arabidopsis thaliana]

165781	ATU027 721	ATL8C2 3454:1 ..998	nap				ATL8C2 3454:4 04..95 1	0.85	g46999 39	74	601	4.5e- 48	(AC007 166) hypoth etical protei n [Arabi dopsis thalia na]
165782	ATU027 722	ATL8C1 3040:1 ..1353	nap				ATL8C1 3040:6 1..709	0.83	g32016 30, g21911 53	74, 40	161, 714	2.3e- 13, 2.4e- 73	(AC004 669) putati ve blue copper - bindin g protei n [Arabi dopsis thalia na]; (AF007 269) contai ns simila rity to blue copper protei ns [Arabi dopsis thalia na]

165783	ATU027 723	ATL8C4 0920:1 ..1109	nap				ATL8C4 0920:9 ..793	0.83	g44159 23	74	909	9.5e- 86	(AC006 282) putati ve glucos yl transf erase [Arabi dopsis thalia na]
165784	ATU027 724	ATL8C3 7780:5 44..33 63	nap				ATL8C3 7780:5 44..32 45	0.82	g45393 47	74	1007	8.7e- 90	(AL035 539) putati ve growth regula tor protei n [Arabi dopsis thalia na]
165785	ATU027 725	ATL8C3 0474:5 849..2 652	nap				ATL8C3 0474:5 730..2 652	0.82	g47340 13	74	1991	3.9e- 160	(AC007 112) putati ve TNP1 of the Taml transp oson [Arabi dopsis thalia na]
165786	ATU027 726	ATL8C3 9204:1	nap				ATL8C3 9204:6	0.79	g36418 36	74	1410	3.0e- 143	(AL023 094)

165789 165790 165791 165792

165789	ATU027 729	ATL8C1 2314:2 336..1	nap					ATL8C1 2314:1 787..6 06	0.75	g45570 78	74	1865	7.5e- 196	thalia na] (AC007 045) putati ve Tall-1 pol polypr oteins, 5, partia l [Arabi dopsis thalia na] (AJ235 273) PSEUDO URIDYL ATE SYNTHA SE I (truA) [Ricke ttsia prowaz ekil] (AC003 113) F2401. 6 [Arabi dopsis thalia na] (Z4735 7) simila
165790	ATU027 730	ATL8S1 7749:5 63..1	nap					ATL8S1 7749:5 45..72	0.74	g38613 82	74	338	5.8e- 30	
165791	ATU027 731	ATL8C1 6519:3 119..1	nap					ATL8C1 6519:3 074..1 10	0.73	g27813 50	74	2540	1.3e- 266	
165792	ATU027 732	ATL8C4 6342:1 ..960	nap					ATL8C4 6342:4 4..952	0.72	g38815 05	74	501	5.7e- 54	

[illegible]

165793	ATU027 733	ATL8C2 6398:7 88..1	nap				ATL8C2 6398:7 88..33	0.72	g38795 83	74	406	2.6e- 36	... [] (Z8158 7) cDNA EST yk213d 3.5 comes from this gene [Caeno rhabdi tis elegan s]
165794	ATU027 734	ATL8C3 8104:5 160..6 20	nap				ATL8C3 8104:3 046..6 20, ATL8C3 8104:4 860..3 570	0.71, 0.47	g48951 71	74	4399	0.0	(AC007 662) putati ve pol protei n with Zn finger CCHC type domain [Arabi dopsis thalia na]
165795	ATU027 735	ATL8S2 6157:9 2..464	nap				ATL8S2 6157:9 2..301	0.71	g28530 89	74	521	3.1e- 52	(AL021 768) putati ve protei n [Arabi dopsis thalia

165796	ATU027 736	ATL8C4 451:82 7..1	nap				ATL8C4 451:45 8..112	0.68	g32490 67	74	427	1.4e- 48	na] (AC004 473) T13D8. 7 [Arabi dopsis thalia na]
165797	ATU027 737	ATL8S2 3805:7 90..33	nap				ATL8S2 3805:7 34..33	0.67	g18699 84	74	205	1.5e- 16	(Z9253 9) hypoth etical protei n Rv1044 [Mycob acteri um tuberc ulosis]
165798	ATU027 738	ATL8C1 5582:7 33..1	nap				ATL8C1 5582:7 33..32	0.67	g21049 49	74	585	5.3e- 45	(U9671 6) MAP kinase -like protei n [Selag inella lepidol phylla]
165799	ATU027 739	ATL8C3 7162:3 228..1	nap				ATL8C3 7162:3 228..6 6	0.66	g26322 54, g31079 05	74, 32	878, 635		(Y1246 5) serine /threo nine kinase [Sorgh

165800	ATU027 740	ATL8C4 183:13 22..1	nap						ATL8C4 183:11 43..44	0.65	g28275 48	74	928	5.0e- 90	um bicol r]; (D8510 1) leaf protei n [Ipomo ea nil]
165801	ATU027 741	ATL8C3 7773:1 ..2057	nap						ATL8C3 7773:6 6..122 4	0.65	g45845 46	74	991	2.6e- 96	(AL049 608) putati ve protei n [Arabi dopsis thalia na]
165802	ATU027 742	ATL8C3 2163:3 804..1	nap						ATL8C3 2163:3 199..1 2	0.62	g45220 05	74	2529	1.2e- 226	(AC007 069) putati ve revers e transc

165803	ATU027 743	ATL8C2 9991:7 92..1	nap					ATL8C2 9991:7 78..89	0.61	g45080 76	74	307	5.4e- 33	(AC005 882) 55659 [Arabi dopsis thalia na]
165804	ATU027 744	ATL8C3 3483:1 113..1 63	nap					ATL8C3 3483:9 79..16 4	0.58	g39351 81	74	1164	3.0e- 119	(AC004 557) F17L21 .24 [Arabi dopsis thalia na]
165805	ATU027 745	ATL8C4 230:15 28..1	nap					ATL8C4 230:14 52..17 7	0.58	g45388 96	74	1623	5.0e- 154	(AL049 482) putati ve protei n [Arabi dopsis thalia na]
165806	ATU027 746	ATL8C9 925:1. .2623	nap					ATL8C9 925:58 8..141 8	0.57	g48369 29	74	638	4.5e- 85	(AC006 085) Hypoth etical protei n [Arabi dopsis thalia

165807	ATU027 747	ATL8S1 2928:1 ..530	nap				ATL8S1 2928:4 1..503	0.56	g97066	74	139	5.3e- 14	hemagglutinin-associated protein - Vibrio cholerae [Vibrio cholerae]
165808	ATU027 748	ATL8S2 0832:4 66..1	nap				ATL8S2 0832:2 79..84	0.54	g26357 11	74	108	8.9e- 09	(Z99120) transcrip-tional regulator [Bacillus subtilis]
165809	ATU027 749	ATL8C1 7572:2 903..1	nap				ATL8C1 7572:2 884..2 44	0.52	g42063 06	74	4672	0.0	(AF049110) prpol [Zea mays]
165810	ATU027 750	ATL8C3 6449:8 90..1	nap				ATL8C3 6449:6 23..20 3	0.49	g41851 29	74	236	4.3e- 18	(AC005724) unknown protein [Arabidopsis thaliana]

165811	ATU027 751	ATL8C4 2501:3 231..1	nap				ATL8C4 2501:3 128..4 45	0.47	g32692 82	74	2949	7.3e- 290	(AL030 978) putati ve protei n [Arabi dopsis thalia na]
165812	ATU027 752	ATL8C3 0537:2 004..1	nap				ATL8C3 0537:1 952..9 5	0.47	g44163 01	74	2838	1.6e- 260	(AF105 716) gag protei n [Zea mays]
165813	ATU027 753	ATL8C1 001:1. .3094	nap				ATL8C1 001:66 ..2123 , ATL8C1 001:30 13..26 59	0.43, 0.92	g43357 20	74	3259	3.9e- 296	(AC006 248) putati ve revers e transc riptas e Tal- 1 [Arabi dopsis thalia na]
165814	ATU027 754	ATL8C4 9489:9 36..19 6	nap				ATL8C4 9489:5 88..19 6	0.42	g45444 60	74	726	3.2e- 69	(AC006 592) putati ve revers e transc riptas

165815	ATU027 755	ATL8S1 6513:5 42..1	nap					ATL8S1 6513:4 90..24 6	0.41	g30243 46	74	144	3.0e- 13	e [Arabi dopsis thalia nal] PLATEL ET- ACTIVA TING FACTOR ACETYL HYDROL ASE IB GAMMA SUBUNI T (PAF ACETYL HYDROL ASE 29 KD SUBUNI T) (PAF- AH 29 KD SUBUNI T) (PAF- AH GAMMA SUBUNI T) [Bos taurus]
165816	ATU027 756	ATL8C4 2520:6 95..1	nap							g45859 86	74	184	1.9e- 07	(AC005 287) Hypoth etical protei

165817	ATU027 757	ATL8C2 9489:6 31..1	nap								g39414 18	74	939	8.0e- 90	n [Arabi dopsis thalia na] (AF062 863) putati ve transc riptio n factor [Arabi dopsis thalia na]
165818	ATU027 758	ATL8C4 6654:1 ..1055	nap								g10463 77	74	508	5.0e- 50	(S7899 4) copper amine oxidas e {C- termin al} {EC 1.4.3. 6} [Lens culina ris]
165819	ATU027 759	ATL8S1 3621:1 ..324	nap								g49482 1	74	376	1.6e- 34	Myxoco ccus xanthu s []
165820	ATU027 760	ATL8C3 3990:1 847..7 44	nap								g45443 74	74	1356		(AC006 920) unknow n protei

	764	7144:4 13..11 0								2								10	PLAST 50S RIBOSO MAL PROTEI N L22 [Pelar gonium hortor um]
165825	ATU027 765	ATL8C6 168:17 15..1	nap							g45586 64	74	663						3.4e- 81	(AC007 063) hypoth etical protei n [Arabi dopsis thalia na]
165826	ATU027 766	ATL8C4 2951:4 88..1	nap							g28298 97	74	166						4.7e- 11	(AC002 311) Unknow n protei n [Arabi dopsis thalia na]
165827	ATU027 767	ATL8C9 468:1. .403	nap							g22526 8	74	386						1.2e- 35	NADH dehydr ogenas e 2- like ORF 180 [Nicot iana tabacu]

[illegible]

165831	ATU027 771	ATL8C3 5743:2 381..5 285	nap							g45389 01	74	3104	0.0	(AL049 482) RNA- direct ed DNA polyme rase- like protei n [Arabi dopsis thalia na]	sor isolog [Arabi dopsis thalia na]
165832	ATU027 772	ATL8C3 3603:5 16..1	nap							g40094 83	74	776	1.0e- 77	(AF068 902) orotid ine- 5'- decarb oxylas e PyrF [Strep tococc us pneumo niae]	(AF068 902) orotid ine- 5'- decarb oxylas e PyrF [Strep tococc us pneumo niae]
165833	ATU027 773	ATL8C9 797:40 6..158 2	nap							g44689 90, g30213 36	74, 54	362, 200	9.7e- 46, 1.3e- 20	(AL035 605) putati ve protei n [Arabi dopsis thalia na]	(AL035 605) putati ve protei n [Arabi dopsis thalia na]

165855	ATU027 795	ATL8C3 5605:7 35..1	nap				ATL8C3 5605:6 89..87	0.99	g13951 75	73	543	2.0e- 55	thalia na] (D4455 0) PcbC [Pseud omonas sp. DJ-12]
165856	ATU027 796	ATL8C3 5377:1 01..12 65	nap				ATL8C3 5377:1 21..12 65	0.98	g36872 51	73	361	9.8e- 35	(AC005 169) unknow n protei n [Arabi dopsis thalia na]
165857	ATU027 797	ATL8S1 9260:1 ..597	nap				ATL8S1 9260:1 07..56 5	0.97	g11702 62	73	95	7.4e- 08	MINOR FIMBRI AL SUBUNI T HIFD PRECUR SOR [Haemo philus influe nzae]
165858	ATU027 798	ATL8C2 9590:2 965..1 997	nap				ATL8C2 9590:2 724..1 997	0.95	g22448 96	73	932	1.2e- 98	(Z9733 8) simila r to HSR201 protei n N.tab cum [Arabi

165859	ATU027 799	ATL8C1 4056:9 567..7 890	nap					ATL8C1 4056:9 509..7 890	0.95	g26233 09	73	742	1.4e- 76	dopsis thalia na]
165860	ATU027 800	ATL8C2 3192:1 ..2876	nap					ATL8C2 3192:1 50..24 78	0.92	g42348 52	73	1305	8.2e- 151	(AF082 133) gag- pol polypr oteins [Zea mays]
165861	ATU027 801	ATL8C4 8599:1 ..874	nap					ATL8C4 8599:1 12..87 4	0.91	g45126 85	73	514	1.6e- 57	(AC006 931) hypoth etical protein [Arabi dopsis thalia na]
165862	ATU027 802	ATL8C4 8286:1 108..1	nap					ATL8C4 8286:1 108..2	0.90	g36953 84	73	253	4.0e- 12	(AF096 370) contai

165863	ATU027 803	ATL8C3 0995:4 66..27 98	nap						1	ATL8C3 0995:5 14..27 98	0.89	g29824 35	73	426	1.1e- 44	ns similarity to the helix- loop- helix DNA- binding domain (Pfam: PF0001 0 HLH, E- value: 0.0046) [Arabi dopsis thalia na]
165864	ATU027 804	ATL8C2 8254:1 ..1330	nap							ATL8C2 8254:3 2..133 0	0.86	g49143 21	73	868	4.9e- 77	(AL022 224) retrot ranspo son like protei n (fragm ent) [Arabi dopsis thalia na] (AC005 489) F14N23 .7

165868	ATU027 808	ATL8C3 9032:2 129..2 29	nap					ATL8C3 9032:1 782..2 29	0.84	g17713 81	73	1264	5.7e- 119	(X9587 7) phosph oinosi tide- specif ic phosph olipas e C [Nicot iana rustic al]
165869	ATU027 809	ATL8C4 9506:2 854..4 01	nap					ATL8C4 9506:2 694..4 37	0.83	g46782 69	73	787	2.3e- 50	(AL049 660) putati ve protei n [Arabi dopsis thalia nal]
165870	ATU027 810	ATL8C2 1201:2 420..1	nap					ATL8C2 1201:2 284..2 70	0.83	g23927 65, g37460 69	73, 33	455, 1098	1.7e- 39, 2.1e- 106	(AC002 534) hypoth etical protei n [Arabi dopsis thalia nal; (AC005 311) putati ve

165871	ATU027 811	ATL8S3 678:1. .409	nap						ATL8S3 678:70 ..409	0.82		g37765 62	73	405	1.2e- 37	revers e transc riptas e [Arabi dopsis thalia na]
165872	ATU027 812	ATL8C1 5964:1 ..931	nap						ATL8C1 5964:3 24..80 6	0.82		g33865 34	73	808	2.2e- 77	(AF078 934) marine r transp osase [Glyci ne max]
165873	ATU027 813	ATL8C9 627:63 61..11 020	nap						ATL8C9 627:77 55..10 426	0.80		g27393 86	73	1533	3.0e- 143	(AC002 505) unknow n protei

165874	ATU027 814	ATL8C2 6969:1 ..1361	nap							ATL8C2 6969:6 61..13 61	0.79	g17314 75	73	1037	4.0e- 108	n [Arabi dopsis thalia na] (U3561 9) ribulo se-1,5 bispho sphate carbox ylase/ oxygen ase large subuni t N- methyl transf eras [Nicot iana tabacu m]
165875	ATU027 815	ATL8C9 722:59 ..1322	nap							ATL8C9 722:59 ..1222	0.79	g18711 76	73	343	4.5e- 29	(U9043 9) unknow n protei n [Arabi dopsis thalia na] (U9321 5) unknow n protei
165876	ATU027 816	ATL8C4 6726:2 175..2 43	nap							ATL8C4 6726:2 157..2 43	0.79	g19463 68	73	361	9.1e- 42	(U9321 5) unknow n protei

165877	ATU027 817	ATL8C3 4541:1 ..1288	nap					ATL8C3 4541:2 62..96 3	0.78	g45593 51	73	1035	2.0e- 94	n [Arabi dopsis thalia na] (AC006 585) hypoeth etical protei n [Arabi dopsis thalia na]
165878	ATU027 818	ATL8C9 128:26 11..69 5	nap					ATL8C9 128:23 48..69 5	0.78	g42630 63	73	1270		(AC005 142) hypoeth etical protei n [Arabi dopsis thalia na]
165879	ATU027 819	ATL8C1 5924:3 52..1	nap					ATL8C1 5924:3 19..22 7	0.76	g38600 20	73	186	2.1e- 17	(AF091 091) unknow n [Homo sapien s]
165880	ATU027 820	ATL8C7 393:13 37..38 9	nap					ATL8C7 393:11 71..86 0	0.71	g31282 16	73	965	1.4e- 91	(AC004 077) putati ve GA4 protei n [Arabi dopsis na]

165881	ATU027 821	ATL8C7 736:17 19..59 1	nap					ATL8C7 736:16 56..59 1	0.71	g41917 74	73	799	5.4e- 83	thalia na] (AC005 917) putati ve beta- 1,3- endogl ucanas e [Arabi dopsis thalia na]
165882	ATU027 822	ATL8C1 3054:5 588..3 284	nap					ATL8C1 3054:4 736..3 284	0.69	g41651 83	73	290	3.5e- 14	(AJ132 349) SAP1 protei n [Antir rhinum majus]
165883	ATU027 823	ATL8C8 666:12 05..30 5	nap					ATL8C8 666:86 8..485	0.69	g44327 99	73	769	1.9e- 63	(AC006 437) putati ve vsf-1 protei n [Arabi dopsis thalia na]
165884	ATU027 824	ATL8C6 221:21 5..890	nap					ATL8C6 221:21 5..556	0.68	g11733 09	73	637	4.3e- 61	MITOCH ONDRIA L 40S RIBOSO MAL PROTEI

165885	ATU027 825	ATL8C3 0937:3 160..1 05	nap					ATL8C3 0937:2 919..2 18	0.68	g32692 82	73	2731	2.0e- 288	(AL030 978) putati ve protei n [Arabi dopsis thalia na]	N S10 PRECUR SOR [Arabi dopsis thalia na]
165886	ATU027 826	ATL8S1 1415:1 ..549	nap					ATL8S1 1415:5 0..525	0.68	g18545 77	73	208	3.3e- 15	(L4294 5) lytR [Staph ylococ cus aureus]	(L4294 5) lytR [Staph ylococ cus aureus]
165887	ATU027 827	ATL8C2 9641:1 923..1	nap					ATL8C2 9641:1 870..6 8	0.68	g30212 67	73	1902	1.6e- 143	(AL022 347) serine /threo nine kinase - like protei n [Arabi dopsis thalia na]	(AL022 347) serine /threo nine kinase - like protei n [Arabi dopsis thalia na]
165888	ATU027 828	ATL8C4 9182:1	nap					ATL8C4 9182:1	0.68	g45875 50	73	514	7.5e- 44	(AC006 577)	(AC006 577)

165889	ATU027 829	ATL8C1 0941:4 626..1 0031	nap						885..3 89	0.67	g35137 45	73	4926	0.0	EST gb R64 848 comes from this gene. [Arabi dopsis thalia na]
165890	ATU027 830	ATL8C3 7951:8 38..22 04	nap						ATL8C3 7951:8 38..21 95	0.67	g26216 58	73	256	2.5e- 09	(AE000 840) conser ved protei n [Metha nobact erium

165891	ATU027 831	ATL8C1 3093:2 932..1	nap					ATL8C1 3093:2 845..2 1	0.63	g40564 31, g40564 68	73, 51	1221, 720	3.3e- 115, 1.3e- 71	thermo autotr ophicu ml (AC005 990) Simila r to gb AJ0 02532 endo- polyga lactur onase from Arabid opsis thalia na and is a member of the polyga lactur onase family PF 002 95. [Arabi dopsis thalia nal; (AC005 990) Contai ns simila rity to gb X66
--------	---------------	----------------------------	-----	--	--	--	--	---------------------------------	------	-------------------------------	--------	--------------	------------------------------	--

165892	ATU027 832	ATL8C2 3063:1 111..1 588	nap						ATL8C2 3063:1 111..1 479	0.62	g45103 78	73	241	6.4e- 13	426 polyga lactur onase from Persea americ ana and is a member of the signal peptid ase family PF1004 61 and polyga lactur onase family PF1002 95. [Arabi dopsis thalia nal]
165893	ATU027 833	ATL8C2 5819:1	nap						ATL8C2 5819:1	0.59	g46782 85	73	904	1.1e- 82	(AC007 017) hypoth etical protei n [Arabi dopsis thalia nal] (AL049 660)

165894	ATU027 834	200..1	nap				144..1 83	0.59	g31352 71	73	2176	9.2e- 230	putative protein [Arabidopsis thaliana]
		ATL8C4 9611:2 926..2 41					ATL8C4 9611:2 926..2 41						(AC003 058) putative receptor- like protein kinase [Arabidopsis thaliana]
165895	ATU027 835	ATL8C4 5746:6 6..228 8	nap				ATL8C4 5746:6 6..203 4	0.58	g18711 85	73	140	0.012	(U9043 9) seven in absent in isolated [Arabidopsis thaliana]
165896	ATU027 836	ATL8C1 3826:8 08..79	nap				ATL8C1 3826:4 04..79	0.56	g23927 66	73	556	1.3e- 53	(AC002 534) hypothetical protein [Arabidopsis thaliana]

165897	ATU027 837	ATL8C3 5787:1 618..1	nap					ATL8C3 5787:6 48..32 0	0.54	g35496 83	73	1763	1.6e- 169	dopsis thalia na] (AL031 394) beta- xylan endohy drolas e - like protei n [Arabi dopsis thalia na] (X9534 3) hypers ensiti vity- relate d gene [Nicot iana tabacu m]
165898	ATU027 838	ATL8C4 6677:1 109..1	nap					ATL8C4 6677:1 073..5 7	0.53	g11715 77	73	801	1.0e- 69	(X9534 3) hypers ensiti vity- relate d gene [Nicot iana tabacu m]
165899	ATU027 839	ATL8C4 9898:3 747..1	nap					ATL8C4 9898:1 339..3 75, ATL8C4 9898:3 747..1 626	0.51, 0.79	g48369 30	73	3598	5.5e- 259	(AC006 085) Hypoth etical protei n [Arabi dopsis thalia na] (AC005 508)
165900	ATU027 840	ATL8C2 4676:1	nap					ATL8C2 4676:5	0.50	g42621 75	73	537	1.7e- 48	(AC005 508)

165901	ATU027 841	..2887	nap				64..28 87	0.50	g11684 70	73	175	1.6e- 19	12894 [Arabi dopsis thalia na]
		ATL8C4 9536:1 633..3 98					ATL8C4 9536:1 388..4 48						PROTEI N KINASE APK1A [Arabi dopsis thalia na]
165902	ATU027 842	ATL8C1 1933:2 365..1 001	nap				ATL8C1 1933:2 365..1 023	0.49	g36953 84	73	222	6.3e- 13	(AF096 370) contai ns simila rity to the helix- loop- helix DNA- bindin g domain (Pfam: PF0001 O HLH, E- value: 0.0046) [Arabi dopsis thalia na]
165903	ATU027 843	ATL8C4 584:1.	nap				ATL8C4 584:16	0.48	g42638 31	73	3953	0.0	(AC006 067)

165904	ATU027 844	.5137	nap					2..457 0										putati ve revers e transc riptas e [Arabi dopsis thalia na]
	ATL8C5 785:19 84..53 54		nap					ATL8C5 785:19 84..51 57	0.46				g40637 60	73	3190			(AC005 561) putati ve POL3 protei n [Arabi dopsis thalia na]
165905	ATU027 845	ATL8C1 5496:2 775..5 60	nap					ATL8C1 5496:2 716..7 09	0.45				g33778 16	73	2576	8.0e- 241		(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi

165906	ATU027 846	ATL8C7 810:29 29..83 9	nap						ATL8C7 810:27 03..83 9	0.43	945672 98	73	2078	2.5e- 206	dopsis thalia na] (AC006 918) putati ve MuDR MURA transp osase [Arabi dopsis thalia na]
165907	ATU027 847	ATL8C2 2446:1 60..27 61	nap						ATL8C2 2446:2 22..24 59	0.42	g43888 34	73	1853	6.0e- 200	(AC006 528) putati ve diseas e resist ance protei n RPP1, 3', partia l [Arabi dopsis thalia na]
165908	ATU027 848	ATL8C4 8468:8 90..1	nap								g21601 36	73	615	7.2e- 45	(AC000 375) F19K23 .4 gene produc t

165909	ATU027 849	ATL8S2 2810:5 80..22 5	nap										g94519 73	94	0.059	[Arabi dopsis thalia nal] mlgA protei n - Shewan ella colwel liana [Shewa nella colwel liana]
165910	ATU027 850	ATL8C1 8925:7 0..908	nap										g45394 68	1230	8.2e- 118	(AL049 500) putati ve protei n [Arabi dopsis thalia nal]
165911	ATU027 851	ATL8S1 4848:1 ..571	nap										g43097 03	164	3.2e- 14	(AC006 266) putati ve transp oson protei n [Arabi dopsis thalia nal]
165912	ATU027 852	ATL8C3 9183:8 92..19	nap										g45811 67	807	2.7e- 78	(AC006 220) putati

165913	ATU027 853	ATL8S1 7723:5 82...82	nap							ATL8S1 7723:5 36...82	1.00	g10507 21	72	358	2.0e- 29	(X9240 5) ompR [Neiss eria mening itidis]	ve transp oson MuDR protei n [Arabi dopsis thalia na]
165914	ATU027 854	ATL8C1 5296:1 959...1	nap									g44163 01	73	2749	1.6e- 201	(AF105 716) gag protei n [Zea mays]	(AF105 716) gag protei n [Zea mays]
165915	ATU027 855	ATL8C1 8577:5 420...7 995	nap									g43357 37	73	887	3.2e- 73	(AC006 248) putati ve serine /threo nine kinase [Arabi dopsis thalia na]	(AC006 248) putati ve serine /threo nine kinase [Arabi dopsis thalia na]
165916	ATU027 856	ATL8S8 376:1. .593	nap									g55788 7	73	153	5.9e- 15	(U1495 2) integr	(U1495 2) integr

165921	ATU027 861	ATL8C2 2408:1 933..1	nap									g33778 16	73	889	4.4e- 73	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
165922	ATU027 862	ATL8C9 695:29 08..12 89	nap									g22449 70	73	1648	1.6e- 177	(Z9734 0) hypoth etical protei n [Arabi dopsis thalia na]

165928	ATU027 868	ATL8C2 3281:1 107..1	nap							g41153 74	73	1479	4.6e- 123	marian al (AC005 967) hypoth etical protei n [Arabi dopsis thalia nal]
165929	ATU027 869	ATL8C1 2594:5 36..1	nap							g38772 52	73	140	9.2e- 09	(Z9338 2) F45G2. 10 [Caeno rhabdi tis elegan s]
165930	ATU027 870	ATL8S1 6712:5 20..94	nap						1.00	g31283 77	72	294	5.8e- 21	(AF010 496) hypoth etical protei n [Rhodo bacter capsul atus]
165931	ATU027 871	ATL8C1 5222:1 ..850	nap							g27087 51	73	571	1.6e- 56	(AC003 952) hypoth etical protei n [Arabi dopsis thalia]

165932	ATU027 872	ATL8C3 5904:4 99..21 07	nap								g17773 12	73	794	3.8e- 80	na] (D3062 2) novel serine /threo nine protei n kinase [Arabi dopsis thalia na]
165933	ATU027 873	ATL8C4 9202:2 692..1 686	nap								g44067 71	72	1316	3.8e- 87	(AC006 836) hypoth etical protei n [Arabi dopsis thalia na]
165934	ATU027 874	ATL8S2 2585:1 ..375	nap								g44553 25	72	275	2.2e- 24	(AL035 525) putati ve protei n [Arabi dopsis thalia na]
165935	ATU027 875	ATL8C2 2077:2 106..1 100	nap								g17065 48	72	730	5.9e- 67	GLUCAN ENDO- 1,3- BETA- GLUCOS IDASE

165937	ATU027 877	ATL8C1 6362:1 87..23 39	nap						ATL8C1 6362:2 27..17 83	0.97	936418 36	72	982	1.1e- 66	[Arabi dopsis thalia na] (AL023 094); putati ve serine /threo nine protei n kinase [Arabi dopsis thalia na]
165938	ATU027 878	ATL8S2 4469:4 88..1	nap						ATL8S2 4469:4 38..18	0.96	911432 11	72	394	5.2e- 33	(U3430 5) ORF9; Method : concep tual transl ation suppli ed by author . [Shige lla sonnei]
165939	ATU027 879	ATL8C1 951:51 ..1879	nap						ATL8C1 951:51 ..1879	0.94	945809 90	72	1014	4.0e- 108	(AF120 335) putati ve transp

165940	ATU027 880	ATL8C1 6730:3 265..1 923	nap						ATL8C1 6730:3 261..1 923	0.93		g39245 99	72	1357	1.2e- 89	osase [Arabi dopsis thalia na] (AF069 442) putati ve oxidor educta se [Arabi dopsis thalia na]
165941	ATU027 881	ATL8S3 0046:5 7..538	nap						ATL8S3 0046:5 7..518	0.92		g14498 9	72	226	1.3e- 18	(J0280 1) thiore doxin C-2 [Coryn ebacte rium nephri dil]
165942	ATU027 882	ATL8C3 4262:3 557..2 327	nap						ATL8C3 4262:3 514..2 327	0.92		g99758	72	1230	3.1e- 119	monosa cchari d transp ort protei n STP4 - Arabid opsis thalia na [Arabi dopsis

165943	ATU027 883	ATL8C1 0747:6 58..1	nap					ATL8C1 0747:6 58..90	0.91	g23219 0	72	243	9.2e- 23	thalia na]
165944	ATU027 884	ATL8C4 4345:3 491..1	nap					ATL8C4 4345:3 491..3 15	0.90	g44673 59	72	3089	7.7e- 291	(AJ002 685) Phosph atidyl inosit ol 4- kinase [Arabi dopsis thalia na]
165945	ATU027 885	ATL8C2 2701:1 268..1	nap					ATL8C2 2701:1 107..7 0	0.88	g45104 06	72	703	1.7e- 76	(AC006 587) putati ve protei n kinase [Arabi dopsis thalia na]
165946	ATU027 886	ATL8C4 5761:1 405..3 3	nap					ATL8C4 5761:1 272..3 3	0.88	g58482 5	72	141	6.7e- 19	B2 PROTEI N [Daucu s

165947	ATU027 887	ATL8S2 6874:4 54..1	nap					ATL8S2 6874:4 24..11 1	0.87	g39293 86	72	325		carota J
165948	ATU027 888	ATL8C6 392:62 6..126 8	nap					ATL8C6 392:62 6..125 2	0.87	g27813 64	72	867	5.7e- 86	UBIQUI NOL- CYTOCH ROME C REDUCT ASE IRON- SULFUR SUBUNIT (RIESKE IRON- SULFUR PROTEIN) (RISP) [Chromatium vinosum]
165949	ATU027 889	ATL8C2 2470:1 ..2083	nap					ATL8C2 2470:6 09..20 83	0.86	g44907 19	72	1627	4.8e- 129	(AC003 113) F24O1. 20 [Arabis dopsis thaliana]
														(AL035 709) putative protein [Arabis dopsis thaliana]

165950	ATU027 890	ATL8S2 9863:1 ..579	nap				ATL8S2 9863:7 4..453	0.86	g43503 9	72	78	0.71	na] (L1730 8) prolin e-rich cell wall protei n [Gossy pium hirsut um]
165951	ATU027 891	ATL8S1 1592:5 33..7	nap				ATL8S1 1592:4 99..7	0.85	g11693 89	72	587	5.9e- 57	RIBULO SE- PHOSPH ATE 3- EPIMER ASE (PENTO SE-5- PHOSPH ATE 3- EPIMER ASE) (PPE) (R5P3E) [Serra tia marces cens]
165952	ATU027 892	ATL8C3 7777:1 319..1	nap				ATL8C3 7777:1 319..8 8	0.84	g44552 06	72	580	2.0e- 56	(AL035 440) putati ve beta- 1, 3- glucan ase

165953	ATU027 893	ATL8C2 3509:2 197..1	nap					ATL8C2 3509:2 197..1 53	0.83	g45843 54	72	1171	4.7e- 59	[Arabi dopsis thalia na] (AC006 420) putati ve PttA- like transp oson protei n [Arabi dopsis thalia na]
165954	ATU027 894	ATL8S2 1792:1 ..330	nap					ATL8S2 1792:6 2..330	0.80	g88669 8	72	423	5.0e- 40	(Z4797 9) inner membra ne or peripl asmic protei n [Pseud omonas fluore scens]
165955	ATU027 895	ATL8C1 072:58 46..19 99	nap					ATL8C1 072:58 46..22 19	0.80	g12804 34	72	120	3.9e- 17	(U4201 4) hemomu cin [Droso phila melano gaster]

165956	ATU027 896	ATL8C3 1924:1 100..1	nap			ATL8C3 1924:1 100..1 0	0.79	g38105 93	72	1640	1.6e- 153	(AC005 398) putati ve sucros e- proton sympor ter [Arabi dopsis thalia na]
165957	ATU027 897	ATL8C4 3843:2 181..1 015	nap			ATL8C4 3843:1 855..1 015	0.78	g22447 52	72	1301		(Z9733 5) hypoth etical protei n [Arabi dopsis thalia na]
165958	ATU027 898	ATL8C3 4488:2 078..1	nap			ATL8C3 4488:2 078..2 4	0.78	g37774 83	72	1548	4.3e- 124	(AB018 695) sulfat e transp orter [Arabi dopsis thalia na]
165959	ATU027 899	ATL8C1 1783:2 87..13 74	nap			ATL8C1 1783:3 06..10 24	0.78	g26739 11	72	425	5.0e- 46	(AC002 561) putati ve squamo sa- promot

165960	ATU027 900	ATL8C4 8488:1 ..1108	nap				ATL8C4 8488:2 84..76 6	0.77	g88234 1	72	210	6.4e- 19	er bindin g protei n [Arabi dopsis thalia na]
165961	ATU027 901	ATL8C4 7159:2 288..1	nap				ATL8C4 7159:2 263..1 40	0.76	g26493 34	72	119	7.4e- 06	(U2470 2) LRP1 [Arabi dopsis thalia na]
165962	ATU027 902	ATL8C3 9018:1 ..959	nap				ATL8C3 9018:1 39..86 3	0.74	g19463 64	72	1407	1.9e- 136	(AE001 018) conser ved hypoth etical protei n [Archaeo globus fulgidus]
165963	ATU027 903	ATL8C3 3612:1 679..1	nap				ATL8C3 3612:7 84..31	0.73	g47536 57	72	137	0.0093	(U9321 5) lipase isolog [Arabi dopsis thalia na]
													(AL049 751) putati

165964	ATU027 904	93	nap				2	ATL8C4 3440:1 335..2 49	0.71	g47339 82, g45444 20	72, 70	897, 595	ve protei n [Arabi dopsis thalia nal]
165965	ATU027 905	ATL8C4 3440:1 613..1	nap					ATL8C4 9734:1 452..1 55	0.70	g43762 03	72	491	(U3522 6) putati ve cytoch rome P-450 [Nicot iana plumba ginifo lia]
165966	ATU027	ATL8C1	nap				ATL8C1	ATL8C1	0.70	g48952	72	508	(AC007

165967	906	9012:1 ..876					9012:1 35..79 9	41				53	659) hypothe- tical protein [Arabi- dopsis thaliana]
	ATU027 907	ATL8S2 52:466 ..1	nap				ATL8S2 52:466 ..7	0.70	g40380 51	72	523	8.1e- 46	(AC005 897) hypothe- tical protein [Arabi- dopsis thaliana]
165968	ATU027 908	ATL8S1 8100:1 ..493	nap				ATL8S1 8100:9 5..415	0.69	g17090 36	72	304	9.7e- 26	OUTER MEMBRANE PROTEIN N MIP PRECURSOR (MACROPHAGE INFECTION POTENTIAL IATOR) (PEPTIDYL- PROLYL CIS- TRANS ISOMERASE) (PPIAS)

165969	ATU027 909	ATL8C6 148:26 81..1	nap					ATL8C6 148:25 99..24 76	0.69	g37460 69	72	2825	1.8e- 288	E) (ROTAM ASE) [Coxie lla burnet ii]
165970	ATU027 910	ATL8C8 48:275 ..1754	nap					ATL8C8 48:290 ..1721	0.68	g30333 91	72	759	6.9e- 67	(AC004 238) putati ve amino acid transp orter [Arabi dopsis thalia na]
165971	ATU027 911	ATL8C3 6131:8 88..1	nap					ATL8C3 6131:4 41..18	0.68	g28326 12	72	133	4.3e- 11	(AL021 711) putati ve protei n (fragm ent)

165972	ATU027 912	ATL8C2 4314:4 237..2 481	nap					ATL8C2 4314:4 112..3 754	0.67	g31504 07	72	298	2.2e- 28	[Arabi dopsis thalia na] (AC004 165) hypoth etical protei n [Arabi dopsis thalia na]
165973	ATU027 913	ATL8C1 7785:1 ..2293	nap					ATL8C1 7785:1 45..19 02	0.67	g36458 99	72	3495	0.0	(U6840 8) 5' end not determ ined experi mental ly [Zea mays]
165974	ATU027 914	ATL8C1 0445:2 531..6 28	nap					ATL8C1 0445:2 457..6 28	0.66	g46801 80	72	1679		(AF111 709) polypr oteine [Oryza sativa subsp. indica]
165975	ATU027 915	ATL8C1 258:14 66..81	nap					ATL8C1 258:13 77..81	0.66	g43888 28	72	1850	1.1e- 185	(AC006 528) putati ve zinc- finger

165976	ATU027 916	ATL8C1 2315:2 856..1	nap							ATL8C1 2315:2 856..1 00	0.66			g29247 81, g48867 56	72, 63	3334, 1287	0.0, 7.4e- 132	(AC002 334) putati ve cellul ose syntha se [Arabi dopsis thalia nal; (AF088 917) cellul ose syntha se cataly tic subuni t [Arabi dopsis thalia nal]
165977	ATU027 917	ATL8C3 8151:1 831..1	nap							ATL8C3 8151:1 720..3 05	0.65			g45811 64	72	2531	3.4e- 263	(AC006 220) putati ve polypr oteins [Arabi dopsis thalia nal]

165978	ATU027 918	ATL8C4 472:1. .2141	nap					ATL8C4 472:11 7..214 1	0.62	g45811 64	72	1111	1.5e- 115	thalia na] (AC006 220) putati ver polyp rotein [Arabi dopsis thalia na]
165979	ATU027 919	ATL8C4 765:1. .1770	nap					ATL8C4 765:33 ..1535	0.62	g47739 20	72	1422	1.8e- 139	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]
165980	ATU027 920	ATL8C1 9940:6 66..17 91	nap					ATL8C1 9940:6 66..15 99	0.61	g40069 02	72	969	8.5e- 95	(Z9970 8) putati ve protei n [Arabi dopsis thalia na]
165981	ATU027 921	ATL8S1 5510:5 50..1	nap					ATL8S1 5510:1 84..79	0.58	g30044 80	72	150	6.1e- 10	(AJ228 333) revers e transc riptas e

165982	ATU027 922	ATL8C1 0658:1 ..1704	nap						0.58		944540 12	72	1012		[Pinus elliott tii]
165983	ATU027 923	ATL8C4 4715:1 ..1047	nap						0.57		927393 77	72	113	3.4e- 05	(AL035 396) Pollen - specif ic protei n precu sor like [Arabi dopsis thalia na]
165984	ATU027 924	ATL8S6 620:1. .376	nap						0.57		910730 47	72	180		(AC002 505) hypoth etical protei n [Arabi dopsis thalia na]
165985	ATU027 925	ATL8C1 658:29	nap						0.54		946462 27	72	2573	4.8e- 239	pupi protei n - Pseudo monas putida [Pseud omonas putida]
															(AC007 235)

165986	ATU027 926	33..1	nap				27..57 4	0.53	g45126 31	72	473	6.7e- 50	hypothetical protein [Arabidopsis thaliana] (AC004793) Contains similarity to [Arabidopsis thaliana]
165987	ATU027 927	ATL8C4 2894:3 ..1000	nap				ATL8C4 2894:3 ..932	0.52	g17070 07	72	777	1.0e- 75	hypothetical protein [Arabidopsis thaliana] (U78721)
165988	ATU027 928	ATL8C1 0645:8 8..121 5	nap				ATL8C1 0645:6 68..10 27	0.52	g43097 56	72	377		putative transposase [Arabidopsis thaliana] (AC006217)
165989	ATU027	ATL8C1	nap				ATL8C1	0.51	g23306	72	163		(Y1456)

165994	ATU027 934	216					nap	ATL8S9 234:56 8..1	ATL8S9 234:56 8..482	0.45	g48951 72	72	227	3.4e- 24	(AC007 662) hypoth etical protei n [Arabi dopsis thalia na]
165995	ATU027 935	216					nap	ATL8C4 5148:1 ..1738	ATL8C4 5148:1 88..17 38	0.45	g44172 66	72	2234	2.0e- 155	(AC007 019) hypoth etical protei n [Arabi dopsis thalia na]
165996	ATU027 936						nap	ATL8S1 1779:2 77..1	ATL8S1 1779:1 99..21	0.45	g22227 51	72	253	3.5e- 21	(Z9718 2) hypoth etical protei n Rv0607 [Mycob acteri um tuberc ulosis

165997	ATU027 937	ATL8C5 699:1. .619	nap					ATL8C5 699:24 3..456	0.45	g34027 17	72	721		J (AC004 261) putati ve heat shock protei n [Arabi dopsis thalia na]
165998	ATU027 938	ATL8C2 4287:1 ..585	nap							g11181 6	72	626	8.0e- 57	probab le pol polypr otein- relate d protei n 4 - rat [Rattu s norveg icus]
165999	ATU027 939	ATL8C9 711:1. .1891	nap							g33096 20	72	1283	1.8e- 123	(AF074 916) resist ance to Pseudo monas syring ae protei n 5 [Arabi dopsis thalia]

944	6297:1 ..579									00				32	338) hypoth etical protei n [Arabi dopsis thalia na]
166005	ATU027 945	ATL8C1 6342:7 27..1	nap							g46782 07	72	696	2.0e- 71	(AC007 134) putati ve revers e transc riptas e [Arabi dopsis thalia na]	
166006	ATU027 946	ATL8C8 711:1. .1098	nap							g33341 33	72	1742	1.2e- 131	CYTOCH ROME P450 89A2 (CYPLX XXIX) (ATH 6-1) [Arabi dopsis thalia na]	
166007	ATU027 947	ATL8S2 5119:1 ..406	nap							g39550 38	72	99	4.4e- 05	(AJ005 575) ORF1 [Strep tomyce s	

166017	ATU027 957	ATL8C1 6700:3 964..3 135	nap									g17857 37	72	120	5.7e- 08	richia coli] (Y0850 2) orf109 b [Arabi dopsis thalia na]
166018	ATU027 958	ATL8S7 418:53 ..320	nap									g14431 2	72	156	3.1e- 12	(J0156 6) 13.8 kd ORF [Plasm id ColEl]
166019	ATU027 959	ATL8C4 2614:1 ..952	nap									g50513 6	72	294	1.4e- 19	(D3079 4) ferred oxin [Oryza sativa]
166020	ATU027 960	ATL8C2 7631:1 ..1145	nap									g48369 29	72	577		(AC006 085) Hypoth etical protei n [Arabi dopsis thalia na]
166021	ATU027 961	ATL8C4 3395:1 917..1	nap									g33675 35, g44681 04	72, 59	2616, 1459		(AC004 392) F8K4.2 2 [Arabi dopsis

166022	ATU027 962	ATL8C2 1589:2 210..1	nap									937	2.8e- 93	thalia nal; (AL022 223) hypoth etical protei n [Arabi dopsis thalia nal]
166023	ATU027 963	ATL8S4 797:41 4..1	nap									101	0.0021	(U4026 5) ATPase subuni t 6 [Trypa nosoma cruzi]
166024	ATU027 964	ATL8C1 4111:1 ..2108	nap									415	4.0e- 34	(AC007 017) unknow n protei n [Arabi dopsis thalia nal]

166025	ATU027 965	ATL8C4 6311:2 119..6 84	nap							g38596 00	72	2546	2.3e- 242	(AF104 919) T15B16 .6 gene produc t [Arabi dopsis thalia nal]
166026	ATU027 966	ATL8C2 131:18 48..36 07	nap							g43253 51	72	3040	1.3e- 310	(AF128 394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei n (GB:X5 7297) [Arabi dopsis thalia nal]
166027	ATU027 967	ATL8S8 05:513 ..1	nap							g43503 9	72	109	0.064	(L1730 8) prolin e-rich cell wall protei n [Gossy

166028	ATU027 968	ATL8S1 5735:4 27..1	nap							g25015 93	72	102	1.1e- 07	HYPOTH ETICAL PROTEI N MJ0531 [Metha nococc us jannas chii]
166029	ATU027 969	ATL8C5 744:49 ..938	nap					ATL8C5 744:30 7..102	1.00	g48368 95	71	684		(AC007 369) Hypoth etical protei n [Arabi dopsis thalia, na]
166030	ATU027 970	ATL8C9 984:30 22..20 18	nap							g45672 95	72	1574	2.1e- 160	(AC006 918) putati ve pol ypr otein [Arabi dopsis thalia na]
166031	ATU027 971	ATL8S2 3130:1 ..379	nap							g21970 50	72	430	5.0e- 40	(AF001 033) putati ve 20kDa subuni t of

166032	ATU027 972	ATL8C4 5546:1 758..3 532	nap									g42630 63	72	1949	7.4e- 162	the V- ATPase [Neuro spora crassa]
166033	ATU027 973	ATL8C4 4774:5 72..23 0	nap									g45875 34	72	462	2.1e- 40	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
166034	ATU027 974	ATL8C3 4617:1 734..1 187	nap									g49143 60	72	272	2.1e- 19	(AC006 577) Belong s to the PF1002 40 Ubiqui tin family . [Arabi dopsis thalia na]
																(AC007 289) hypoth etical protei n [Arabi dopsis thalia

166035	ATU027 975	ATL8C4 173:10 ..887	nap									g46782 88	72	401	3.4e- 42	na] (AL049 660) putati ve protei n [Arabi dopsis thalia na]
166036	ATU027 976	ATL8S6 147:59 2..88	nap									g11682 17	72	180		DNA-3- METHYL ADENIN E GLYCOS IDASE (3- METHYL ADENIN E-DNA GLYCOS YLASE) (TAG) [Haemo philus influe nzae Rd]
166037	ATU027 977	ATL8C1 8060:1 047..1	nap									g46999 37, g43887 23	72, 47	258, 855	1.9e- 26, 1.5e- 87	(AC007 166) hypoth etical protei n [Arabi- dopsis thalia na]; (AC006

166038	ATU027 978	ATL8C1 4402:3 222..1	nap					ATL8C1 4402:8 34..55 7	0.99		g40564 50, g23927 63	71, 33	533, 204	5.7e- 57, 8.6e- 18	413) hypoth etical protei n [Arabi dopsis thalia na]
166039	ATU027 979	ATL8C2 7586:1	nap					ATL8C2 7586:8	0.99		g18815 85	71	422		(AC005 990) Simila r to OBP32p ep protei n gb U37 698 from Arabid opsis thalia na. [Arabi dopsis thalia na]; (AC002 534) hypoth etical protei n [Arabi dopsis thalia na]
															(U7248 9)

166040	ATU027 980	ATL8C4 5634:1 237..1	nap					57..46 3	0.98	g32490 91	71	1118	1.1e- 107	remori n [Solan um tubero sum] (AC004 473) Strong simila rity to water stress - induce d protei n, WSI76 isolog T08I13 .2 gb 227 5196 from A. thalia na BAC gb AC0 02337. [Arabi dopsis thalia na]
166041	ATU027 981	ATL8S2 7973:5 82..1	nap					ATL8S2 7973:4 54..17	0.98	g31360 21	71	553	3.3e- 44	(AL023 591) alanyl -tRNA synthe

166042	ATU027 982	ATL8S1 5525:6 5..633	nap						ATL8S1 5525:9 3..322	0.97	g36081 45	71	131	2.3e- 12	(AC005 314) hypoth etical protei n [Arabi dopsis thalia na]
166043	ATU027 983	ATL8C3 381:93 1..342 7	nap						ATL8C3 381:93 1..334 7	0.97	g23448 94	71	2498	9.3e- 256	(AC002 388) hypoth etical protei n [Arabi dopsis thalia na]
166044	ATU027 984	ATL8C3 7732:2 498..1 95	nap						ATL8C3 7732:1 544..5 17	0.96	g22450 28	71	1839	1.4e- 195	(Z9734 1) limone ne cyclas e [Arabi dopsis thalia na]
166045	ATU027 985	ATL8C1 065:95 9..294	nap						ATL8C1 065:90 5..344	0.96	g17091 70	71	173	1.6e- 09	26S PROTEA SOME REGULA

166046	ATU027 986	ATL8C3 8290:1 ..1029	nap							ATL8C3 8290:6 8..837	0.96	g43712 94	71	1350	3.5e- 111	TORY SUBUNI T MTS3 [Schiz osacch aromyc es pombe] (AC006 260) hypoth etical protei n [Arabi dopsis thalia na]
166047	ATU027 987	ATL8C1 7362:1 ..1411	nap							ATL8C1 7362:5 7..915	0.93	g23927 64	71	411	3.3e- 27	(AC002 534) hypoth etical protei n [Arabi dopsis thalia na]
166048	ATU027 988	ATL8C1 851:15 55..1	nap							ATL8C1 851:14 82..92	0.93	g29110 70	71	925	3.8e- 105	(AL021 960) hypoth etical protei n [Arabi dopsis thalia na]
166049	ATU027 989	ATL8C1 0212:1	nap							ATL8C1 0212:1	0.92	g22450 09	71	1499		(Z9734 1)

166050	ATU027 990	ATL8C1 0483:8 97..20 9	nap					759..3 33	0.91	g29110 79	71	500		hypothetical protein [Arabidopsis thaliana]
166051	ATU027 991	ATL8C4 336:1. .1719	nap					ATL8C4 336:56 ..1719	0.91	g42638 30	71	1426	3.0e-93	(AC006067) hypothetical protein [Arabidopsis thaliana]
166052	ATU027 992	ATL8C3 154:89 2..1	nap					ATL8C3 154:89 2..47	0.91	g10839 44	71	113	0.072	sericin MG-2 - greater wax moth (fragments) []
166053	ATU027 993	ATL8C3 0720:2 565..8	nap					ATL8C3 0720:2 525..1	0.91	g15180 59	71	410	1.5e-35	(U65650) blue-

166054	ATU027 994	ATL8C1 0444:5 808..8 880	nap							0.90	g38601 67	71	3350			copper bingin g protei n III [Arabi dopsis thalia na]
									902	ATL8C1 0444:6 048..8 292						(AF098 964) diseas e resist ance protei n RPP1- WSC [Arabi dopsis thalia na]
166055	ATU027 995	ATL8C1 1162:1 62..67 2	nap							0.89	g42637 05	71	377	6.6e- 35		(AC006 223) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]
166056	ATU027 996	ATL8S8 344:95 ..589	nap							0.86	g17887 74	71	143	1.9e- 09		(AE000 330) orf,

166057	ATU027 997	ATL8C1 7771:6 87..1	nap						ATL8C1 7771:6 13..31 5	0.85		g46894 53	71	191	4.8e- 14	hypothetical protein [Escherichia coli] (AC006267) predicted protein of unknown function [Arabidopsis thaliana]
166058	ATU027 998	ATL8C4 9761:3 56..13 54	nap						ATL8C4 9761:3 56..12 99	0.84		g13635 28	71	1239	9.1e- 123	gag protein - maize [Zea mays]
166059	ATU027 999	ATL8C1 3590:1 ..2049	nap						ATL8C1 3590:1 49..20 49	0.83		g30754 01, g47739 00	71, 46	478, 1284	3.2e- 52, 3.2e- 133	(AC004484) hypothetical protein [Arabidopsis thaliana]; (AF074021) putative

166060	ATU028 000	ATL8C4 4125:5 7..183 0	nap						ATL8C4 4125:5 7..183 0	0.81	g22621 43	71	482	2.4e- 44	(AC002 330) putati ve serine /threo nine protei n kinase [Arabi dopsis thalia na]
166061	ATU028 001	ATL8C1 4079:4 712..1 851	nap						ATL8C1 4079:4 712..2 488	0.80	g47739 10	71	87	0.0011	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
166062	ATU028 002	ATL8C4 1728:3 58..14 50	nap						ATL8C4 1728:3 58..14 33	0.79	g44552 03	71	567	6.7e- 51	(AL035 440) putati ve protei n

166067	ATU028 007	ATL8S2 4301:5 03..9	nap					ATL8S2 4301:4 17..9	0.76	g41855 50	71	299	5.1e- 23	n [Arabi dopsis thalia na]
166068	ATU028 008	ATL8C4 2305:4 53..97 9	nap					ATL8C4 2305:4 53..85 9	0.76	g40068 26	71	324	3.8e- 18	(AF108 766) LexA repres sor [Rhodo bacter sphaer oides] (AC005 970) unknow n protei n [Arabi dopsis thalia na]
166069	ATU028 009	ATL8C4 1631:6 33..1	nap					ATL8C4 1631:6 33..12 3	0.75	g38314 54	71	617	5.7e- 65	(AC005 700) hypoth etical protei n [Arabi dopsis thalia na]
166070	ATU028 010	ATL8C9 088:1. .1664	nap					ATL8C9 088:75 9..166 4	0.73	g47739 14	71	580		(AF147 259) No defini tion line

166071	ATU028 011	ATL8S2 6621:7 68..1	nap					ATL8S2 6621:6 47..30	0.73	g54364 6	71	534	found [Arabi dopsis thalia na]
													orf1 3' of TB- iaaM (broad host range, insert ion elemen t IS870. 1) - pTi [Agrob acteri um tumefa ciens]
166072	ATU028 012	ATL8C3 5046:3 63..99 4	nap					ATL8C3 5046:6 79..86 6	0.73	g41153 75	71	934	(AC005 967) hypoth etical protei n [Arabi dopsis thalia na]
166073	ATU028 013	ATL8C4 9321:1 ..509	nap					ATL8C4 9321:1 54..50 3	0.71	g10797 20	71	93	(U3976 4) eukary otic releas e

														factor 3 [Ricin us commun is]
166074	ATU028 014	ATL8S5 40:547 ..1	nap					ATL8S5 40:547 ..20	0.70	g17068 56	71	394	9.2e- 23	FLAGEL LAR BIOSYN THETIC PROTEI N FLIP [Salmo nella typhim urium]
166075	ATU028 015	ATL8C2 1776:1 ..2130	nap					ATL8C2 1776:7 2..213 0	0.70	g14916 15	71	939	5.4e- 93	(X9992 3) male steril ity 2- like protei n [Arabi dopsis thalia na]
166076	ATU028 016	ATL8S2 6765:1 ..529	nap					ATL8S2 6765:3 09..36 8	0.69	g23227 4	71	86	17.6 KD CLASS II HEAT SHOCK PROTEI N [Arabi dopsis thalia na]	

166077	ATU028 017	ATL8C3 318:1. .1009	nap				ATL8C3 318:21 0..326	0.68	g17781 41	71	343	1.1e- 46	(U6632 1) phosph ate/ph osphate nolpyr uvate transl ocator precu sor; PPT [Arabi dopsis thalia na]
166078	ATU028 018	ATL8C1 2114:1 ..2744	nap				ATL8C1 2114:5 3..266 0	0.68	g22449 29	71	3537	0.0	(Z9733 9) unname d protei n produc t [Arabi dopsis thalia na]
166079	ATU028 019	ATL8C2 7332:2 016..5 28	nap				ATL8C2 7332:1 939..5 28	0.68	g27958 07	71	628		(AC003 674) hypoth etical protei n [Arabi dopsis thalia na]
166080	ATU028 020	ATL8C3 0524:1	nap				ATL8C3 0524:1	0.68	g40068 24	71	1364	2.2e- 113	(AC005 970) [Arabi dopsis thalia na]

166081	ATU028 021	811..2 48	nap				811..2 48	0.64	g44068 02	71	324	0.9998	(AC006 304) hypoth etical protei n [Arabi dopsis thalia na]
166082	ATU028 022	ATL8S2 5337:4 34..10 6	nap				ATL8S2 5337:3 41..10 6	0.64	g33778 16	71	2204	1.4e- 193	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
166083	ATU028	ATL8S2	nap				ATL8S2	0.63	g12969	71	221	2.5e-	(X9593

	023	5320:1 15..56 0					5320:1 15..40 1		68			16	8) rnhB [Porph yromon as gingiv alis]
166084	ATU028 024	ATL8S2 4525:1 ..590	nap				ATL8S2 4525:4 8..569	0.62	g16532 94	71	166	4.3e- 11	(D9091 2) hypoth etical protei n [Synec hocyst is sp.]
166085	ATU028 025	ATL8C3 1182:2 250..2 11	nap				ATL8C3 1182:1 986..1 163	0.61	g33778 16	71	1858	3.0e- 163	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
166086	ATU028 026	ATL8S3 93:1..	nap				ATL8S3 93:44.	0.60	g39413 68	71	272	3.1e- 25	(AF043 654)

166091	ATU028 031	ATL8C7 738:13 91..1	nap					ATL8C7 738:13 91..41 7	0.55	g28327 06	71	631	2.4e- 55	dopsis thalia na] (AL021 713) hypoth etical protei n [Arabi dopsis thalia na]
166092	ATU028 032	ATL8C4 4630:9 57..1	nap					ATL8C4 4630:9 57..67	0.53	g48504 03	71	920	2.5e- 94	(AC007 357) F3F19. 23 [Arabi dopsis thalia na]
166093	ATU028 033	ATL8C4 4246:8 90..37 5	nap					ATL8C4 4246:8 09..37 5	0.53	g39414 64	71	739	1.9e- 60	(AF062 886) putati ve transc riptio n factor [Arabi dopsis thalia na]
166094	ATU028 034	ATL8C1 0290:1 829..1	nap					ATL8C1 0290:1 770..4 2	0.51	g47412 01	71	656		(AL049 746) putati ve protei n [Arabi

166097	ATU028 037	ATL8C3 1562:9 7..197 3	nap						ATL8C3 1562:1 77..19 73	0.46	g47339 70, g42630 53	71, 46	333, 142	3.6e- 35, 5.1e- 11	(AC007 264) hypoth etical protei n [Arabi dopsis thalia na]; (AC005 142) hypoth etical protei n [Arabi dopsis thalia na]	gue [Horde um vulgar e]
166098	ATU028 038	ATL8C2 4755:2 921..2 233	nap						ATL8C2 4755:2 856..2 233	0.44	g47551 98	71	313	2.2e- 26	(AC007 018) putati ve zinc finger protei n [Arabi dopsis thalia na]	(AC007 018) putati ve zinc finger protei n [Arabi dopsis thalia na]
166099	ATU028 039	ATL8C2 9876:9 05..1	nap						ATL8C2 9876:9 05..12	0.42	g47739 12	71	481	1.8e- 31	(AF147 259) No	(AF147 259) No

166105	ATU028 045	ATL8C3 3257:5 002..3 496	nap									g41159 21	71	1859	7.5e- 189	thalia nal (AF118 222) F3H7.4 gene produc t [Arabi dopsis thalia nal]
166106	ATU028 046	ATL8C2 5800:3 92..74 6	nap									g19944	71	227	8.2e- 19	(X0693 0) PR- 1a protei n (AA 1 - 168) [Nicot iana tabacu m]
166107	ATU028 047	ATL8C2 0395:1 ..501	nap									g45080 80	71	268	7.0e- 19	(AC005 882) 69873 [Arabi dopsis thalia nal]
166108	ATU028 048	ATL8C4 1110:8 22..11 4	nap									g37639 21	71	818	2.2e- 73	(AC004 450) putati ve pirin protei n [Arabi dopsis thalia nal]

166113	ATU028 053	ATL8C3 068:64 9..1	nap							g46782 10	71	302	2.6e- 16	(AC007 134) hypoth etical protei n [Arabi dopsis thalia na]
166114	ATU028 054	ATL8C3 3460:1 447..1	nap							g38057 69	71	1477	1.9e- 139	(AC005 693) putati ve mudR- like transp oson [Arabi dopsis thalia na]
166115	ATU028 055	ATL8C3 6897:2 554..3 689	nap						ATL8C3 6897:2 585..3 656	g17070 74	70	466	1.0e- 43	(U8045 0) M01E11 .2 [Caeno rhabdi tis elegan s]
166116	ATU028 056	ATL8C1 1601:1 ..4543	nap							g45443 72	71	3149	0.0	(AC006 920) putati ve revers e transc riptas e

166117	ATU028 057	ATL8C9 448:30 4..1	nap									g40068 17	71	454	1.8e- 42	[Arabi dopsis thalia nal] (AC005 970) hypoth etical protei n [Arabi dopsis thalia nal]
166118	ATU028 058	ATL8C4 4309:1 307..1 708	nap									g43357 34	71	644	1.3e- 38	(AC006 248) putati ve calmod ulin [Arabi dopsis thalia nal]
166119	ATU028 059	ATL8S1 9707:2 13..1	nap									g45844 72	71	122	1.0e- 08	(AL049 587) hypoth etical protei n [Strep tomyce s coelic olor]
166120	ATU028 060	ATL8C7 097:38 89..39 0	nap									g33193 60	71	2451	1.4e- 191	(AF077 408) contai ns simila

063	7043:3 335..1									31						141	067) putati ve revers e transc riptas e [Arabi dopsis thalia na]
166124	ATU028 064	ATL8C4 0425:1 ..1428	nap							g45860 66	71	1449	3.7e- 163	(AC006 194) putati ve pol polypr otein, 3' partia l [Arabi dopsis thalia na]			
166125	ATU028 065	ATL8C2 5202:9 097..9 828	nap							g43097 03	71	803	2.5e- 66	(AC006 266) putati ve transp oson protei n [Arabi dopsis thalia na]			
166126	ATU028 066	ATL8C4 1515:3 09..59	nap							g36883 28	71	211	7.8e- 17	(AJ228 325) revers			

		6															e transc riptas e [Ginkg o biloba]
166127	ATU028 067	ATL8C4 6890:1 383..1	nap									g30754 76	71	77	0.0066	(AF039 383) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]	
166128	ATU028 068	ATL8C1 7219:1 ..1251	nap							ATL8C1 7219:7 86..11 52	1.00	g47739 14	70	538	4.5e- 39	(AF147 259) No defini tion line found [Arabi dopsis thalia na]	
166129	ATU028 069	ATL8C4 4057:2 1..529	nap									g30367 94	71	216	5.0e- 22	(AL022 373) putati ve bZIP transc riptio	

166134	ATU028 074	ATL8C2 4218:1 ..920	nap										g31933 16	71	1266	7.2e- 115	n [Arabi dopsis thalia na] (AF069 299) contai ns simila rity to nucleo tide sugar epimer ases [Arabi dopsis thalia na]
166135	ATU028 075	ATL8C4 6863:9 97..1	nap										g45843 54	71	400	9.7e- 32	(AC006 420) putati ve PttA- like transp oson protei n [Arabi dopsis thalia na]
166136	ATU028 076	ATL8S2 9411:4 33..14 2	nap										g17229 17	71	124	1.5e- 09	HYPOTH ETICAL 14.9 KD PROTEI

166140	ATU028 080	ATL8C3 6649:1 92..67 0	nap				ATL8C3 6649:1 97..67 0	0.94	g45672 54	70	790	4.2e- 81	cunicu lus] (AC007 070) putati ve myb protei n [Arabi dopsis thalia na]
166141	ATU028 081	ATL8S2 8945:3 51..1	nap				ATL8S2 8945:3 33..25 3	0.93	g84914 5	70	170	2.1e- 14	(U2674 6) protei n kinase BNPK-2 [Brass ica napus]
166142	ATU028 082	ATL8C4 1743:1 ..3202	nap				ATL8C4 1743:6 7..279 0	0.93	g37790 26	70	1896	1.9e- 207	(AC005 171) putati ve retrot ranspo son [Arabi dopsis thalia na]
166143	ATU028 083	ATL8C1 0940:5 692..2 016	nap				ATL8C1 0940:4 468..2 016	0.90	g25296 78	70	180	5.5e- 06	(AC002 535) unknow n protei n [Arabi dopsis

166144	ATU028 084	ATL8S2 5789:4 93..1	nap					ATL8S2 5789:4 20..37	0.89	g29095 27	70	236	2.1e- 19	thalia nal (AL021 932) hypoth etical protei n Rv0452 [Mycob acteri um tuberc ulosis]
166145	ATU028 085	ATL8C3 811:14 43..1	nap					ATL8C3 811:13 39..58 6	0.89	g12796 40	70	323	1.4e- 32	(X9220 4) NAM [Petun ia x hybrid a]
166146	ATU028 086	ATL8S5 123:35 4..1	nap					ATL8S5 123:35 4..13	0.89	g58475 2	70	211	4.6e- 17	AMINOP EPTIDA SE N (ALPHA - AMINO CYLPEP TIDE HYDROL ASE) [Caulo bacter cresce ntus]
166147	ATU028 087	ATL8C2 933:1. .603	nap					ATL8C2 933:54 ..286	0.88	g47690 04	70	123	2.2e- 14	(AF140 598) ring- box protei

166148	ATU028 088	ATL8S2 8609:9 ..564	nap							ATL8S2 8609:2 1..557	0.88	g45123 65	70	210	5.9e- 17	n 1 [Homo sapien s] (AB011 837) enoyl CoA hydrat ase [Bacil lus halodu rans] (AF036 940) 2- hydrox ychrom ene carbox ylate isomer ase [Pseud omonas sp. U2]
166149	ATU028 089	ATL8S5 134:42 5..1	nap							ATL8S5 134:42 5..27	0.87	g42204 31	70	130	8.6e- 10	(U3434 6) unknow n [Parac occus denitr ifican s] (AF000 684) putati
166150	ATU028 090	ATL8S7 341:34 ..574	nap							ATL8S7 341:34 ..568	0.87	g10028 63	70	188	4.0e- 10	
166151	ATU028 091	ATL8S1 2311:5 41..1	nap							ATL8S1 2311:4 30..50	0.86	g29830 18	70	207	1.6e- 19	

166152	ATU028 092	ATL8C4 8473:1 ..1059	nap				ATL8C4 8473:9 0..105 9	0.85	g48951 90	70	617	5.7e- 42	(AC007 661) unknown protein [Arabi dopsis thalia na]
166153	ATU028 093	ATL8S2 0244:5 15..1	nap				ATL8S2 0244:4 57..20	0.84	g25012 14	70	239	3.7e- 21	THIOL: DISULF IDE INTERC HANGE PROTEI N DSBG PRECUR SOR [Esche richia coli]
166154	ATU028 094	ATL8C1 9455:1 05..26 74	nap				ATL8C1 9455:1 05..44 3, ATL8C1 9455:9 69..26 60	0.84, 0.86	g28282 84	70	1089	7.0e- 122	(AL021 687) hypoth etical protein [Arabi dopsis thalia na]
166155	ATU028	ATL8C5	nap				ATL8C5	0.84	g10762	70	927	1.4e-	cucumi

166156	095	0074:1 ..2132	nap					0074:1 94..20 38	0.84	g40385 92	70	1239	1.5e- 139	94	sin (EC 3.4.21 .25) precu- sor - muskne lon (fragm ent) [J]
	ATU028 096	ATL8C7 4:3904 ..754	nap					ATL8C7 4:3793 ..770							(Y1040 3) RNA- direct ed RNA polyme rase [Lycop ersico n escule ntum]
166157	ATU028 097	ATL8C1 5672:8 05..93	nap					ATL8C1 5672:7 31..25 4	0.80	g45389 17	70	152	2.2e- 22		(AL049 482) putati ve protei n [Arabi dopsis thalia na]
166158	ATU028 098	ATL8C4 1136:1 ..2367	nap					ATL8C4 1136:5 46..23 67	0.79	g41153 63	70	1985	1.4e- 182		(AC005 957) putati ve diseas e resist

166162	ATU028 102	ATL8C1 8920:3 452..1	nap					ATL8C1 8920:1 307..1 78, ATL8C1 8920:3 452..2 393	0.77, 0.84	g10649 31	70	676	1.5e- 81	(X9296 5) cyclin A-like protei n [Nicot iana tabacu m]	e [Arabi dopsis thalia na]
166163	ATU028 103	ATL8C3 7826:1 ..3891	nap					ATL8C3 7826:2 22..31 35	0.77	g16527 33	70	680	1.6e- 44	(D9090 8) glycog en operon protei n GlgX [Synec hocyst is sp.]	
166164	ATU028 104	ATL8C4 1154:1 ..531	nap					ATL8C4 1154:1 01..45 8	0.76	g24942 80	70	429	3.7e- 28	ELONGA TION FACTOR TS (EF- TS) [Synec hocyst is sp.]	
166165	ATU028 105	ATL8C3 2533:8 2..237 1	nap					ATL8C3 2533:8 2..231 8	0.76	g45444 06	70	679	3.9e- 76	(AC006 955) hypoth etical	

166166	ATU028 106	ATL8S1 8314:4 02..1	nap				ATL8S1 8314:3 60..11 5	0.75	g14079 8	70	581	3.3e- 56	HYPOTH ETICAL 21.2 KD PROTEI N IN HUTC 3'REGI ON [Pseud omonas putida]
166167	ATU028 107	ATL8C3 9909:1 ..2070	nap				ATL8C3 9909:1 58..19 45	0.74	g48504 12	70	1352	1.4e- 140	(AC007 288) putati ve MuDR MURA transp osase [Arabi dopsis thalia na]
166168	ATU028 108	ATL8C1 4435:6 175..5 507	nap				ATL8C1 4435:6 175..5 507	0.74	g28326 82	70	135	0.58	(AL021 712) hypoth etical protei n [Arabi dopsis thalia

166169	ATU028 109	ATL8C3 2184:1 247..4 64	nap				ATL8C3 2184:1 166..4 64	0.72	g45080 76	70	255	1.1e- 26	na] (AC005 882) 55659 [Arabi dopsis thalia na]
166170	ATU028 110	ATL8C3 873:15 89..31 7	nap				ATL8C3 873:15 28..40 6	0.72	g33353 59	70	728	1.0e- 79	(AC003 028) unknow n protei n [Arabi dopsis thalia na]
166171	ATU028 111	ATL8C1 5785:8 1..132 1	nap				ATL8C1 5785:9 5..130 5	0.69	g26606 67	70	523	1.2e- 52	(AC002 342) putati ve polyga lactur onase [Arabi dopsis thalia na]
166172	ATU028 112	ATL8C2 2420:1 810..1	nap				ATL8C2 2420:1 775..2 2	0.67	g46801 80	70	1597	4.4e- 133	(AF111 709) polypr otein [Oryza sativa subsp. indica]
166173	ATU028 113	ATL8C7 087:1.	nap				ATL8C7 087:10	0.67	g33954 29	70	371	2.4e- 35	(AC004 683)

166174	ATU028 114	.1191	nap				7..118 4	0.66	g41153 66	70	866	4.7e- 68	hypoth etical protei n [Arabi dopsis thalia na] (AC005 957) revers e transc riptas e-like protei n [Arabi dopsis thalia na]
166175	ATU028 115	ATL8C3 4591:1 ..934	nap				ATL8C3 4591:2 56..66 8	0.66	g42630 63	70	1024	1.1e- 92	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na] (AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
166176	ATU028 116	ATL8C1 413:11 44..1	nap				ATL8C1 413:10 15..40 8	0.66	g45389 91	70	404	1.0e- 38	(AL049 481) hypoth etical protei n [Arabi dopsis thalia na]

166177	ATU028 117	ATL8C1 3248:1 ..642	nap				ATL8C1 3248:5 72..69	0.65	g45859 34	70	133	8.2e- 09	(AC007 211) putati ve ser/th r kinase [Arabi dopsis thalia na]
166178	ATU028 118	ATL8C1 1302:1 086..1	nap				ATL8C1 1302:1 060..3 47	0.65	g48369 49	70	1083	3.4e- 119	(AC006 085) RNA helica se [Arabi dopsis thalia na]
166179	ATU028 119	ATL8S2 0298:5 35..70	nap				ATL8S2 0298:5 31..70	0.63	g40625 00	70	91	0.47	(D9073 1) ProW protei n homolo g [Esche richia coli]
166180	ATU028 120	ATL8C1 335:17 74..1	nap				ATL8C1 335:17 00..69	0.62	g28326 46	70	1775	2.6e- 191	(AL021 710) MuDR transp osable elemen t - like protei

166181 ATU028 121 ATL8C2 2812:1 ..3182 nap ATL8C2 2812:3 06..31 82 0.62 g14916 15 70 888 2.8e-77 n [Arabi dopsis thalia na] (X9992 3) male sterility 2-like protein [Arabi dopsis thalia na]

166181	ATU028 121	ATL8C2 2812:1 ..3182	nap					ATL8C2 2812:3 06..31 82	0.62	g14916 15	70	888	2.8e- 77	n [Arabi dopsis thalia na] (X9992 3) male steril ity 2- like protei n [Arabi dopsis thalia na]
166182	ATU028 122	ATL8C5 473:1. .1251	nap					ATL8C5 473:74 ..1175	0.62	g45394 22	70	657	3.7e- 77	(AL049 171) putati ve protei n [Arabi dopsis thalia na]
166183	ATU028 123	ATL8C1 0573:6 34..46	nap					ATL8C1 0573:4 91..18 0	0.62	g11720 07	70	280	1.4e- 23	PUTATI VE PANTOA TE-- BETA- ALANIN E LIGASE (PANTO THENAT E SYNTH E TASE)

166184	ATU028 124	ATL8C2 6520:2 538..1	nap					ATL8C2 6520:2 481..4 52	0.61	g42636 55	70	1628	6.0e- 180	(PANTO ATE ACTIVA TING ENZYME) [Schiz osacch aromyc es pombel] (AC006 136) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
166185	ATU028 125	ATL8C4 7461:6 192..2 3	nap					ATL8C4 7461:6 192..6 18	0.60	g45443 72, g44328 01	70, 30	2191, 354	1.2e- 237, 1.7e- 32	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia nal]; (AC006 437) unknow

166186	ATU028 126	ATL8C1 2166:2 03...39 30	nap						ATL8C1 2166:2 03...20 14	0.58	g45860 66	70	2122	2.0e- 217	n protei n [Arabi dopsis thalia nal] (AC006 194) putati ve pol polypr oteins, 3', partia l [Arabi dopsis thalia nal]
166187	ATU028 127	ATL8C1 7616:5 52...1	nap						ATL8C1 7616:5 52...89	0.56	g33778 09	70	487	4.3e- 63	(AF075 597) contai ns simila rity to SRF- type transc riptio n factor s (DNA- bindin g and dimeri zation domain

166190	ATU028 130	ATL8S9 93:35. .506	nap			ATL8S9 93:35. .182	0.54	g46894 51	70	387	3.0e- 23	(AC006 267) hypoth etical protei n [Arabi dopsis thalia na]
166191	ATU028 131	ATL8C3 3921:7 99..19 8	nap			ATL8C3 3921:6 35..20 1	0.53	g47411 85	70	420		(AL049 746) hypoth etical protei n [Arabi dopsis thalia na]
166192	ATU028 132	ATL8C4 3933:6 49..42 1	nap			ATL8C4 3933:5 87..44 4	0.51	g42622 12	70	210		(AC006 161) putati ve leucin e zipper trancr iption factor [Arabi dopsis thalia na]
166193	ATU028 133	ATL8C4 6435:1 203..1	nap			ATL8C4 6435:1 203..1 3	0.50	g31504 07	70	384	6.8e- 35	(AC004 165) hypoth etical protei n

166194	ATU028 134	ATL8S2 9002:4 09..30	nap						ATL8S2 9002:2 58..55	0.50	g30470 70	70	373	2.4e- 31	[Arabi dopsis thalia na] (AF058 825) No defini tion line found [Arabi dopsis thalia na]
166195	ATU028 135	ATL8S6 684:47 4..33	nap						ATL8S6 684:47 2..171	0.46	g16527 93	70	234		(D9090 8) hypoth etical protei n [Synec hocyst is sp.]
166196	ATU028 136	ATL8C2 5353:1 608..1 53	nap						ATL8C2 5353:1 488..5 84	0.46	g36953 96	70	1324	5.8e- 120	(AF096 372) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila

166200	ATU028 140	ATL8C4 19:157 ..977	nap							g34136 98	70	659	5.4e- 56	(AC004 747) hypoth etical protei n [Arabi dopsis thalia na]
166201	ATU028 141	ATL8S2 5034:1 8..276	nap							g14431 2	70	192	6.0e- 15	(J0156 6) 13.8 kd ORF [Plasm id ColE1]
166202	ATU028 142	ATL8C6 133:1. .1015	nap							g39285 43	70	1327	6.6e- 136	(AB016 819) UDP- glucos e glucos yltran sferas e [Arabi dopsis thalia na]
166203	ATU028 143	ATL8C2 2001:6 21..1	nap							g44068 06	70	1033	5.6e- 32	(AC006 201) hypoth etical protei n [Arabi dopsis thalia na]

166204	ATU028 144	ATL8C3 6410:2 329..4 077	nap									g45811 64	70	1231	1.8e- 126	(AC006 220) putati ve polyp rotein [Arabi dopsis thalia na]
166205	ATU028 145	ATL8C4 9268:1 ..425	nap									g28326 75	70	168	3.0e- 12	(AL021 712) hypoth etical protei n [Arabi dopsis thalia na]
166206	ATU028 146	ATL8C3 4969:6 04..1	nap									g33675 87	70	634	1.3e- 52	(AL031 135) putati ve protei n [Arabi dopsis thalia na]
166207	ATU028 147	ATL8S1 2766:3 08..1	nap									g41848 8	70	304	5.7e- 21	HYPOTH ETICAL 15.9 KD PROTEI N IN RBN- FDHE INTERG ENIC

166208	ATU028 148	ATL8C3 1076:1 001..1	nap										g24938 14	70	634	1.1e- 63	REGION (O145) [Esche richia coli]
166209	ATU028 149	ATL8C5 799:25 81..29 71	nap										g30470 69	70	411		(AF058 825) No defini tion line found [Arabi dopsis thalia na]
166210	ATU028 150	ATL8C3 8710:1 ..677	nap										g21297 71	70	856	2.9e- 87	xylogl ucan endotr ansgly cosyla se- relate d protei n XTR- 6 - Arabid

[illegible]

166211	ATU028 151	ATL8C4 1833:1 930..3 12	nap							g33675 35	70	1695	1.6e- 166	(AC004 392) F8K4.2 2 [Arabi dopsis thalia na]	opsis thalia na [Arabi dopsis thalia na]
166212	ATU028 152	ATL8C3 6610:1 412..1	nap							g45570 67	70	2003	8.7e- 203	(AC007 045) putati ve pol polypr oteins [Arabi dopsis thalia na]	putati ve pol polypr oteins [Arabi dopsis thalia na]
166213	ATU028 153	ATL8C1 4134:6 51..15 06	nap							g33865 34	70	437	7.0e- 45	(AF078 934) marine r transp osase [Glyci ne max]	(AF078 934) marine r transp osase [Glyci ne max]
166214	ATU028 154	ATL8C1 7721:8 45..27	nap							g41851 44	70	542	5.6e- 59	(AC005 724) unknow n protei n	(AC005 724) unknow n protei n

166219	ATU028 159	ATL8C2 3193:1 ..1107	nap							g27087 42	70	535	4.6e- 43	s] (AC003 952) putati ve zinc- finger protei n [Arabi dopsis thalia na]
166220	ATU028 160	ATL8C1 0129:1 253..3 06	nap						1.00	g21941 19	69	506		(AC002 062) No defini tion line found [Arabi dopsis thalia na]
166221	ATU028 161	ATL8C4 7214:5 296..2 535	nap							g27393 66	70	417	1.8e- 18	(AC002 505) SF16 like protei n [Arabi dopsis thalia na]
166222	ATU028 162	ATL8C2 2723:6 46..13 25	nap							g43371 90	70	1003	7.9e- 78	(AC006 403) hypo thetical protei n

166227	ATU028 167	ATL8C3 9518:4 728..6 002	nap						g44173 05	70	922	1.5e- 86	(AC006 446) hypoth etical protei n [Arabi dopsis thalia na]
166228	ATU028 168	ATL8C3 1243:1 736..2 45	nap						g44553 65	70	417	3.1e- 40	(AL035 524) putati ve protei n [Arabi dopsis thalia na]
166229	ATU028 169	ATL8S2 3137:1 86..65 6	nap						g29842 72	70	206	2.6e- 19	(AE000 769) hypoth etical protei n [Aquif ex aeolic us]
166230	ATU028 170	ATL8C4 1035:1 179..2 28	nap						g47739 14	70	437	4.4e- 36	(AF147 259) No defini tion line found [Arabi dopsis thalia

166233	ATU028 173	ATL8C3 193:10 7..138 8	nap										g46999 37	70	837	1.7e- 83	zinc finger motif prosite: QDOC 50158) [Arabi dopsis thalia nal] (AC007 166) hypoth etical protein [Arabi dopsis thalia nal]
166234	ATU028 174	ATL8C4 9702:1 ..1103	nap										g49143 30	70	610	1.1e- 61	(AC005 489) F14N23 .16 [Arabi dopsis thalia nal]
166235	ATU028 175	ATL8C3 2539:4 039..4 21	nap										g45811 43, g28276 37	69, 40	247, 305	4.5e- 24, 5.6e- 21	(AC006 919) hypoth etical protein [Arabi dopsis thalia nal]; (AL021 636)

166236	ATU028 176	ATL8C8 200:12 23..29 0	nap					ATL8C8 200:11 94..29 0	0.98	g45080 76	69	285	5.4e- 24	putative protein [Arabi dopsis thalia na]
166237	ATU028 177	ATL8C4 7477:2 135..1	nap					ATL8C4 7477:1 879..5 6	0.97	g32506 97, g34137 10	69, 44	677, 146	3.6e- 68, 3.5e- 13	(AC005 882) 55659 [Arabi dopsis thalia na]
166238	ATU028 178	ATL8S2 1092:4 81..48	nap					ATL8S2 1092:4 75..48	0.93	g17082 27	69	219	1.4e- 17	(AL024 486) putative protein [Arabi dopsis thalia na]; (AC004 747) hypoth etical protein [Arabi dopsis thalia na]
														TRANSC RIPTIO NAL ACTIVA TOR

166239	ATU028 179	ATL8C2 4607:2 69..14 94	nap							ATL8C2 4607:3 17..14 94	0.91	g22449 14	69	1645	6.3e- 157	HLVU [Vibri O choler ael] (Z9733 9) simila rity to probab le splici ng factor Ceprp2 1 [Arabi dopsis thalia nal]
166240	ATU028 180	ATL8S1 1196:1 86..61 3	nap							ATL8S1 1196:2 31..52 8	0.90	g28285 44	69	128	7.3e- 11	(U8995 7) UreX [Actin obacil lus pleuro pneumo niae]
166241	ATU028 181	ATL8S1 7837:4 35..1	nap							ATL8S1 7837:3 91..56	0.88	g42404 32	69	194	5.2e- 19	(AF080 235) reduct ase homolo g [Strep tomyce s cyanog

166242	ATU028 182	ATL8C9 710:87 4..162 2	nap				ATL8C9 710:87 4..155 1	0.87	g31766 79	69	518	4.8e- 52	enus] (AC003 671) F1707. 8 [Arabi dopsis thalia na]
166243	ATU028 183	ATL8S5 72:543 ..1	nap				ATL8S5 72:511 ..85	0.87	g30061 28	69	395	2.1e- 36	(AJ004 870) hypo etical protei n [Therm oanaer obacte rium thermo saccha rolyti cum]
166244	ATU028 184	ATL8C3 1443:9 19..63 9	nap				ATL8C3 1443:8 71..63 9	0.86	g31525 85	69	436	7.3e- 41	(AC002 986) Contai ns simila rity to auxin- induce d protei n TM018A 10.6 from A. thalia

166245	ATU028 185	ATL8C2 5254:7 44..23 84	nap						ATL8C2 5254:7 44..22 49	0.85			g38343 24	69	137	1.8e- 12	na BAC gb AFO 13294. [Arabi dopsis thalia na]
166246	ATU028 186	ATL8C1 3217:2 019..8 61	nap						ATL8C1 3217:1 976..8 61	0.85			g16528 65	69	330	2.1e- 33	(D9090 9) NADH dehydr ogenas e [Synec hocyst is sp.]
166247	ATU028 187	ATL8C3 1178:1 ..1147	nap						ATL8C3 1178:7 5..988	0.83			g28800 50	69	936	1.9e- 100	(AC002 340) putati ve protei n

166248	ATU028 188	ATL8C6 504:20 09..30 68	nap					ATL8C6 504:21 12..25 57	0.83	g30803 94	69	226	9.2e- 26	kinase [Arabi dopsis thalia nal] (AE022 603) hypo thetical protei n [Arabi dopsis thalia nal]
166249	ATU028 189	ATL8C1 7118:1 ..1293	nap					ATL8C1 7118:1 93..12 93	0.82	g33778 33	69	935	1.5e- 82	(AF075 598) contai ns simila rity to Nicoti ana tabacu m probab le integr ase (GB:X8 0830) [Arabi dopsis thalia nal]
166250	ATU028 190	ATL8C2 3561:1 254..7 41	nap					ATL8C2 3561:1 184..7 41	0.81	g38314 61	69	660	6.8e- 67	(AC005 700) hypo thetical

166251	ATU028 191	ATL8C1 3288:1 ..2223	nap					ATL8C1 3288:6 92..22 23	0.80	g22621 03	69	972	1.5e- 105	protei n [Arabi dopsis thalia na] (AC002 343) unknow n protei n [Arabi dopsis thalia na]
166252	ATU028 192	ATL8C5 326:79 8..252	nap					ATL8C5 326:74 0..290	0.80	g42180 06	69	238	3.7e- 20	(AC006 135) putati ve protei n kinase [Arabi dopsis thalia na]
166253	ATU028 193	ATL8C8 301:26 63..13 8	nap					ATL8C8 301:20 18..34 1	0.80	g47739 08	69	2271	7.3e- 216	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
166254	ATU028 194	ATL8C2 6042:1	nap					ATL8C2 6042:6	0.79	g43357 37	69	642	2.4e- 64	(AC006 248)

		..1135						7..113 5						putati ve serine /threo nine kinase [Arabi dopsis thalia na]
166255	ATU028 195	ATL8C3 4572:1 ..1385	nap					ATL8C3 4572:1 60..12 62	0.78	g38057 69	69	1285	3.9e- 122	(AC005 693) putati ve mudR- like transp oson [Arabi dopsis thalia na]
166256	ATU028 196	ATL8C1 9752:1 002..2 966	nap					ATL8C1 9752:1 002..2 781	0.78	g22447 84	69	1473	2.9e- 153	(Z9733 5) hypoth etical protei n [Arabi dopsis thalia na]
166257	ATU028 197	ATL8C3 8081:1 ..1003	nap					ATL8C3 8081:6 9..948	0.77	g43143 86	69	1046	1.3e- 90	(AC006 232) putati ve rac GTPase activa ting protei

166258	ATU028 198	ATL8C4 796:44 00..20 94	nap					ATL8C4 796:42 14..20 94	0.76	g45811 64	69	825	6.6e- 88	n [Arabi dopsis thalia na] (AC006 220) putati ve polypr otein [Arabi dopsis thalia na]
166259	ATU028 199	ATL8C1 5518:2 012..1	nap					ATL8C1 5518:2 012..7 5	0.75	g37774 83	69	1515	1.3e- 129	(AB018 695) sulfat e transp orter [Arabi dopsis thalia na]
166260	ATU028 200	ATL8C2 4858:2 484..4 23	nap					ATL8C2 4858:2 484..4 23	0.73	g33778 45	69	909	3.5e- 78	(AF076 274) contai ns simila rity to the basic region plus leucin e zipper trancr iption

166261	ATU028 201	ATL8C3 9280:9 20..19 62	nap					ATL8C3 9280:1 835..1 481	0.73	g44551 52	69	484	1.2e- 48	factors (Pfam: bZIP.h mm, score: 12.77) [Arabi dopsis thalia na]
166262	ATU028 202	ATL8C2 1775:1 ..314	nap					ATL8C2 1775:1 88..31 4	0.73	g42204 78	69	115	4.4e- 08	(AC006 069) hypothe- tical protein [Arabi dopsis thalia na]
166263	ATU028 203	ATL8C4 7143:1 931..6 81	nap					ATL8C4 7143:1 771..1 061	0.72	g28326 78	69	519	3.8e- 58	(AL021 712) putative protein [Arabi na]

															dopsis thalia nal
166264	ATU028 204	ATL8C5 794:52 ..1214	nap					ATL8C5 794:52 ..928	0.71	g32928 29	69	921			(AL031 018) putati ve protei n [Arabi dopsis thalia nal
166265	ATU028 205	ATL8C7 932:34 02..1	nap					ATL8C7 932:34 02..16	0.68	g42063 06	69	1453	3.5e- 121		(AF049 110) prpol [Zea mays]
166266	ATU028 206	ATL8S1 8739:8 4..565	nap					ATL8S1 8739:8 4..416	0.67	g11756 84	69	332	7.7e- 17		HYPOTH ETICAL PROTEI N HI1198 [Haemo philus influe nzae Rd]
166267	ATU028 207	ATL8C4 7167:1 ..1063	nap					ATL8C4 7167:8 3..100 3	0.67	g24941 32	69	1434	1.5e- 149		(AC002 376) Contai ns simila rity to human dimeth ylani ine monoox

166268	ATU028 208	ATL8C2 6443:1 ..821	nap				ATL8C2 6443:4 24..81 4	0.66	g46783 02	69	424	3.6e- 43	ygenase (gb M6 4082). [Arabi dopsis thalia na]
166269	ATU028 209	ATL8S2 6730:5 72..31	nap				ATL8S2 6730:4 71..18 6	0.65	g46999 36	69	377		(AL049 655) putati ve protei n [Arabi dopsis thalia na]
166270	ATU028 210	ATL8C4 9979:1 832..4 46	nap				ATL8C4 9979:1 006..4 46	0.65	g45824 55	69	328	4.4e- 34	(AC007 071) putati ve recept or protei n kinase [Arabi dopsis thalia na]

166271	ATU028 211	ATL8C2 3782:6 79..15 08	nap				ATL8C2 3782:6 79..14 62	0.64		g47259 55	69	820	2.2e- 84	nal (AL049 730) putati ve protei n [Arabi dopsis thalia nal]
166272	ATU028 212	ATL8C1 044:15 21..81 5	nap				ATL8C1 044:15 21..81 5	0.64		g46894 77	69	265	1.0e- 21	(AC007 213) pseud ogene [Arabi dopsis thalia nal]
166273	ATU028 213	ATL8C4 8260:1 ..1020	nap				ATL8C4 8260:7 5..102 0	0.64		g44067 60	69	101	3.5e- 07	(AC006 836) hypoth etical protei n [Arabi dopsis thalia nal]
166274	ATU028 214	ATL8C2 4303:1 ..301	nap				ATL8C2 4303:4 8..301	0.63		g33778 46	69	366	6.4e- 32	(AF076 274) No defini tion line found [Arabi dopsis thalia nal]

166275	ATU028 215	ATL8C4 6943:5 6..149 6	nap				ATL8C4 6943:5 6..595 ATL8C4 6943:1 449..1 328	0.63, 0.81	945672 54	69	562	6.4e- 60	(AC007 070) putati ve myb protei n [Arabi dopsis thalia na]
166276	ATU028 216	ATL8C2 914:1. .2336	nap				ATL8C2 914:25 6..233 6	0.61	945824 55	69	316	2.1e- 31	(AC007 071) putati ve recept or protei n kinase [Arabi dopsis thalia na]
166277	ATU028 217	ATL8C3 2368:1 ..1394	nap				ATL8C3 2368:1 130..3 22	0.60	944173 05	69	840	1.2e- 80	(AC006 446) hypoth etical protei n [Arabi dopsis thalia na]
166278	ATU028 218	ATL8C2 749:1. .667	nap				ATL8C2 749:15 8..590	0.60	945126 49	69	894	3.6e- 88	(AC007 048) hypoth etical protei n [Arabi

166279	ATU028 219	ATL8C3 6731:9 86..1	nap					ATL8C3 6731:8 65..11 0	0.59	g32818 52	69	871	1.4e- 80	dopsis thalia nal (AL031 004) peroxi dase - like protei n [Arabi dopsis thalia nal]
166280	ATU028 220	ATL8C4 9228:1 ..1510	nap					ATL8C4 9228:1 50..13 70	0.58	g19463 56	69	1215	3.1e- 128	(U9321 5) hypoth etical protei n H1.2fl k [Arabi dopsis thalia nal]
166281	ATU028 221	ATL8C1 214:54 8..117 7	nap					ATL8C1 214:89 6..574	0.58	g43097 03	69	152	2.1e- 15	(AC006 266) putati ve transp oson protei n [Arabi dopsis thalia nal]
166282	ATU028 222	ATL8C4 64:131	nap					ATL8C4 64:117	0.58	g44903 39	69	224	1.4e- 21	(AL035 656)

166283	ATU028 223	4..494	nap				4..564	0.57	g38926 99	69	194	4.0e- 23	putative protein [Arabidopsis thaliana] (AL033 545) hypothetical protein (fragment) [Arabidopsis thaliana]
		ATL8C2 291:57 54..50 10					ATL8C2 291:56 11..51 97						
166284	ATU028 224	ATL8C4 4347:1 121..1	nap				ATL8C4 4347:1 056..2 26	0.54	g46894 79	69	154	1.6e- 10	(AC007 213) hypothetical protein [Arabidopsis thaliana]
166285	ATU028 225	ATL8C4 4368:3 92..1	nap				ATL8C4 4368:2 35..17 4	0.54	g31525 78	69	338	7.6e- 32	(AC002 986) YUP8H1 2R.10 [Arabidopsis thaliana]
166286	ATU028 226	ATL8C4 6241:1	nap				ATL8C4 6241:9	0.53	g15185 40	69	1399	3.9e- 142	(U5341 8)

166287	ATU028 227	..998	nap				2..894	0.52		g16535 91	69	198	1.2e- 05	UDP- glucose dehydrogenase [Glycine max] (D90914) hypothetical protein [Synecchocystis sp.]
166288	ATU028 228	ATL8C3 9231:4 812..5 73	nap				ATL8C3 9231:4 748..5 73	0.51		g43097 67	69	2287	1.8e- 213	(AC006217) putative Athila retroelement ORF1 protein [Arabidopsis thaliana] (AF013293) No definition line found
166289	ATU028 229	ATL8C2 7673:4 58..92 7	nap				ATL8C2 7673:4 97..91 9	0.50		g22528 28	69	271		

166290	ATU028 230	ATL8C1 6359:3 201..9 05	nap						ATL8C1 6359:3 037..9 05	0.48		g49144 10	69	792	8.9e- 51	[Arabi dopsis thalia na] (AL050 352) putati ve protei n [Arabi dopsis thalia na]
166291	ATU028 231	ATL8C4 7627:1 03..47 39	nap						ATL8C4 7627:1 03..47 33	0.46		g42063 06	69	1516	4.3e- 152	(AF049 110) prpol [Zea mays]
166292	ATU028 232	ATL8C1 3641:1 669..7 14	nap						ATL8C1 3641:1 667..7 96	0.42		g62966 9	69	638	2.1e- 70	hypoth etical protei n - tomato []
166293	ATU028 233	ATL8C4 2027:3 137..2 01	nap						ATL8C4 2027:2 963..2 01	0.40		g47339 86	69	2196	1.6e- 155	(AC007 209) hypoth etical protei n [Arabi dopsis thalia na]
166294	ATU028 234	ATL8C4 5703:1 082..1	nap									g28326 78, g22447 52	69, 58	308, 173	3.2e- 37, 2.7e- 20	(AL021 712) putati ve protei

166298	ATU028 238	ATL8S5 407:71 0..119	nap										g22752 14	69	216	6.7e- 21	(AC002 337) hypoth etical protei n [Arabi dopsis thalia nal]	retro ranspo son- like orf [Arabi dopsis thalia nal]
166299	ATU028 239	ATL8C1 1350:3 34..64 2	nap										g47339 99	69	101	3.4e- 08	(AC007 187) hypoth etical protei n [Arabi dopsis thalia nal]	(AC007 187) hypoth etical protei n [Arabi dopsis thalia nal]
166300	ATU028 240	ATL8S1 6154:1 ..497	nap										g30891 77	69	312	1.4e- 29	(AF060 080) hypoth etical protei n [Chlor obium tepidu m]	(AF060 080) hypoth etical protei n [Chlor obium tepidu m]
166301	ATU028	ATL8C1	nap										g32490	69, 44	259,	4.0e-	(AC004	(AC004

166302	241	868:98 9..1								67, g46894 79	85	15, 4.5e- 06	473) T13D8. 7 [Arabi dopsis thalia nal; (AC007 213) hypoeth etical protein [Arabi dopsis thalia nal]
	ATU028 242	ATL8S2 3678:3 39..1	nap							g30634 62	163	0.0002 5	(AC003 981) F22O13 .24 [Arabi dopsis thalia nal]
166303	ATU028 243	ATL8C2 4392:3 05..12 87	nap							g23927 63	342	1.7e- 26	(AC002 534) hypoeth etical protein [Arabi dopsis thalia nal]
166304	ATU028 244	ATL8C4 5454:1 111..1	nap							g45862 58	1411	4.2e- 145	(AL049 640) putati ve protein

166305	ATU028 245	ATL8C1 673:21 23..1	nap								g33778 16	69	641	1.6e- 59	n [Arabi dopsis thalia na]
166306	ATU028 246	ATL8C4 5661:1 252..1 996	nap								g39257 03	69	566	5.0e- 60	(X9590 5) 14- 3-3 protei n [Lycop ersico n escule ntum]
166307	ATU028 247	ATL8C3 7006:3 54..1	nap								g36872 22	69	199		(AC005 169) hypoth etical

166308	ATU028 248	ATL8C1 4825:5 883..8 642	nap										g47739 10	69	69	0.034	prote n [Arabi dopsis thalia na]
166309	ATU028 249	ATL8S2 2606:4 99..1	nap										g16538 86	69	175	1.3e- 14	(D9091 7) DNR [Synec hocyst is sp.]
166310	ATU028 250	ATL8C7 011:1. .1021	nap										g13701 44	69	435	9.7e- 45	(Z7395 0) RAB11B [Lotus japoni cus]
166311	ATU028 251	ATL8C8 642:1. .535	nap										g10742 2	69	66	0.80	prolin e-rich protei n PRB3S (cys) - human (fragm ent) []

166312	ATU028 252	ATL8C3 7403:6 31..1	nap							g48951 64	69	792		(AC007 231) putati ve diseas e resist ance protei n [Arabi dopsis thalia nal]
166313	ATU028 253	ATL8C3 3180:2 834..1	nap							g36953 93	69	3982	0.0	(AF096 371) contai ns simila rity to retrov iral aspart yl protea ses (Pfam: rvp.hm m, score: 11.80) [Arabi dopsis thalia nal]
166314	ATU028 254	ATL8S5 436:46 5..1	nap							g32876 90	69	211	6.2e- 11	(AC003 979) T22J18 .15

166315	ATU028 255	ATL8C1 3546:7 104..1	nap								g42638 31	69	3474	0.0	[Arabi dopsis thalia na] (AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia na]
166316	ATU028 256	ATL8C2 9264:1 597..2 16	nap								g38596 00	69	1878	1.5e- 176	(AF104 919) T15B16 .6 gene produc t [Arabi dopsis thalia na]
166317	ATU028 257	ATL8C1 9861:7 53..1	nap								g45824 55	69	216	8.2e- 22	(AC007 071) putati ve recept or protei n kinase [Arabi dopsis thalia na]

166326	ATU028 266	ATL8C4 7586:2 58..12 12	nap					ATL8C4 7586:2 94..93 6	0.98		g43253 72	68	487	1.7e- 53	dopsis thalia na] (AF128 396) contai ns simila rity to protei n disulf ide, isomer ases [Arabi dopsis thalia na]
166327	ATU028 267	ATL8C1 4630:1 322..6 76	nap					ATL8C1 4630:1 273..6 93	0.98		g32928 15	68	191	1.0e- 09	(AL031 018) hypo thetical protei n [Arabi dopsis thalia na]
166328	ATU028 268	ATL8C2 5432:1 015..2 56	nap					ATL8C2 5432:8 96..25 6	0.97		g44540 09	68	1172	1.1e- 110	(AL035 396) putati ve protei n [Arabi dopsis thalia na]

166329	ATU028 269	ATL8C1 6673:1 ..2328	nap				ATL8C1 6673:6 1..966	0.96	g47739 18	68	1437	2.6e- 123	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
166330	ATU028 270	ATL8C3 1467:1 253..4 66	nap				ATL8C3 1467:1 131..4 72	0.96	g46783 02, g45394 31	68, 52	186, 201	1.0e- 17, 4.5e- 20	(AL049 655) putati ve protei n [Arabi dopsis thalia na]; (AL049 171) putati ve protei n [Arabi dopsis thalia na]
166331	ATU028 271	ATL8C3 4170:1 ..1426	nap				ATL8C3 4170:1 26..14 26	0.94	g33778 40, g15185 40	68, 39	395, 711	5.0e- 38, 7.9e- 75	(AF075 598) contai ns simila rity to E. coli nitrog

166333	ATU028 273	ATL8C4 3369:1 050..1 876	nap			ATL8C4 3369:1 050..1 862	0.91	934260 40	68	490		(AC005 168) hypoth etical protei n [Arabi dopsis thalia na]
166334	ATU028 274	ATL8C1 668:22 00..49 7	nap			ATL8C1 668:17 27..50 6	0.91	930471 04	68	1018	2.0e- 85	(AF058 919) No defini tion line found [Arabi dopsis thalia na]
166335	ATU028 275	ATL8C1 1857:2 3..940	nap			ATL8C1 1857:2 3..821	0.90	944552 12	68	1119	6.2e- 117	(AL035 440) putati ve NPK1- relate d protei n kinase [Arabi dopsis thalia na]
166336	ATU028 276	ATL8C3 7496:4 102..1	nap			ATL8C3 7496:4 102..2 05	0.89	928646 25	68	2464		(AL021 811) putati ve protei

166337	ATU028 277	ATL8S4 790:48 0..1	nap						ATL8S4 790:48 0..81	0.88	g28223 33	68	211	1.9e- 09	n [Arabi dopsis thalia na] (AF016 485) trxB [Halob acteri um sp. NRC-1]
166338	ATU028 278	ATL8S1 3045:1 ..460	nap						ATL8S1 3045:5 5..443	0.87	g30251 93	68	229	1.1e- 20	HYPOTH ETICAL PROTEI N IN H2- DEPEND ENT RESPIR ATION REGION (ORF1) [Azoto bacter chrooc occum]
166339	ATU028 279	ATL8S2 8192:4 83..1	nap						ATL8S2 8192:4 74..28	0.87	g16527 15	68	182	2.6e- 11	(D9090 7) hypoth etical protei n [Synec hocyst is sp.]
166340	ATU028 280	ATL8C6 54:100 ..2141	nap						ATL8C6 54:368 ..2093	0.86	g32427 11	68	1794	3.5e- 143	(AC003 040) hypoth

166341	ATU028 281	ATL8C2 2650:1 ..1180	nap				ATL8C2 2650:1 71..56 4	0.86	g43099 69	68	467	4.5e- 49	etical protei n [Arabi dopsis thalia nal] (AC002 983) putati ve phosph oglyce ride transf er protei n [Arabi dopsis thalia nal]
166342	ATU028 282	ATL8C2 6935:1 252..2 914	nap				ATL8C2 6935:1 273..2 914	0.85	g17234 90	68	182	5.3e- 13	HYPOTH ETICAL 32.6 KD PROTEI N C1F3.0 4C IN CHROMO SOME I [Schiz osacch aromyc es pombe]
166343	ATU028 283	ATL8C1 1757:1 ..1576	nap				ATL8C1 1757:4 ..1576	0.85	g48263 99	68	901	1.6e- 81	(AJ012 423) wall-

166344	ATU028 284	ATL8C9 706:30 04..67 8	nap							ATL8C9 706:25 76..67 8	0.85	g24659 25	68	882	9.1e- 76	associ ated kinase 2 [Arabi dopsis thalia na]
166345	ATU028 285	ATL8S3 0710:1 ..490	nap							ATL8S3 0710:1 76..34 3	0.84	g17106 19	68	336	1.6e- 25	RIBONU CLEASE PH (RNASE PH) (TRNA NUCLEO TIDYLT RANSFE RASE) [Pseud omonas aerugi nos]
166346	ATU028 286	ATL8C1 1144:6 94..1	nap							ATL8C1 1144:5 90..11 0	0.83	g42042 62	68	554	2.3e- 39	(AC005 223) 37783 [Arabi dopsis

166347	ATU028 287	ATL8C1 9193:2 505..1	nap				ATL8C1 9193:1 928..3 3	0.83	g36500 38	68	1964	2.2e- 164	thalia na] (AC005 396) hypothe- tical protein [Arabi- dopsis thalia na]
166348	ATU028 288	ATL8C4 5289:1 997..8 45	nap				ATL8C4 5289:1 923..8 45	0.82	g26424 41	68	1676	1.0e- 162	(AC002 391) putative cytochrome P450 [Arabi- dopsis thalia na]
166349	ATU028 289	ATL8C2 2784:1 240..7 6	nap				ATL8C2 2784:1 057..8 2	0.82	g30045 64	68	548	3.6e- 56	(AC003 673) putative receptor Ser/Th- r protein kinase [Arabi- dopsis thalia na]
166350	ATU028 290	ATL8C6 55:386	nap				ATL8C6 55:386	0.82	g42638 31	68	3583	2.0e- 299	(AC006 067)

166351	ATU028 291	8..110						8..179 8	0.82	g23263 42	68	497	1.3e- 38	putative reverse transcriptase [Arabidopsis thaliana]
		ATL8C1 012:41 1..178 9						ATL8C1 012:41 9..161 6						(Y1118 7) Terpene cyclase, TC1 [Arabidopsis thaliana]
166352	ATU028 292	ATL8C2 2529:1 494..3 233						ATL8C2 2529:1 494..3 012	0.82	g24438 80	68	1440	3.1e- 141	(AC002 294) Hypothetical protein [Arabidopsis thaliana]
166353	ATU028 293	ATL8C1 5497:2 080..1						ATL8C1 5497:2 080..5 5	0.81	g25019 86	68	175	5.7e- 11	(AF022 178) TAFII250 transcriptio n factor [Mus]

166354	ATU028 294	ATL8C7 035:1. .1322	nap					ATL8C7 035:47 3..121 8	0.80	g24979 77	68	196	2.2e- 13	muscul us] HYPOTH ETICAL 30.2 KD PROTEI N IN CAPB 3'REGI ON [Pseud omonas fragil]
166355	ATU028 295	ATL8S1 3664:4 70..53	nap					ATL8S1 3664:4 54..53	0.80	g11732 93	68	238	4.3e- 19	FERRIT IN LIKE PROTEI N 1 [Haemo philus influe nzae Rd]
166356	ATU028 296	ATL8C5 208:22 28..1	nap					ATL8C5 208:21 89..97	0.79	g39156 76	68	245	3.9e- 18	DNA POLYME RASE EPSILO N SUBUNI T B (DNA POLYME RASE II SUBUNI T B) [Homo sapien s]

166357	ATU028 297	ATL8C4 6028:1 383..1	nap			ATL8C4 6028:1 383..1 94	0.77	g24987 32	68	1035	1.8e- 143	PROBAB LE NADP- DEPEND ENT OXIDOR EDUCTA SE P2 [Arabi dopsis thalia na]
166358	ATU028 298	ATL8C3 5361:6 1..312 8	nap			ATL8C3 5361:6 1..312 0	0.76	g12559 51	68	1257	1.1e- 124	(X9693 2) PS60 [Nicot iana tabacu m]
166359	ATU028 299	ATL8C1 8732:4 8..296 9	nap			ATL8C1 8732:4 8..165 0, ATL8C1 8732:2 817..1 935	0.74, 0.47	g42638 30	68	1253	5.7e- 122	(AC006 067) hypoth etical protei n [Arabi dopsis thalia na]
166360	ATU028 300	ATL8S2 0227:7 32..1	nap			ATL8S2 0227:7 18..18 3	0.72	g21902 63	68	499	1.3e- 50	(D8638 7) A- type cyclin [Catha ranthu s roseus]
166361	ATU028 301	ATL8C1 1014:1	nap			ATL8C1 1014:6	0.70	g36953 95	68	935	5.6e- 80	(AF096 372)

166362	ATU028 302	..3061	73..24 76	0.70	g37575 16	68	1221	2.2e- 130	contai ns simila rity to revers e transc riptas e (Pfam: PF0007 8 rvt, E=4.3e -08) [Arabi dopsis thalia na]
	ATL8C6 838:1. .2885	nap	ATL8C6 838:93 ..2489						(AC005 167) putati ve TMV resist ance protei n [Arabi dopsis thalia na]
166363	ATU028 303	..1184	ATL8C1 4919:2 64..10 98	0.69	g43712 94	68	421	3.7e- 32	(AC006 260) hypo thetical protei n [Arabi dopsis thalia na]
	ATL8C1 4919:1 ..1184	nap							

166364	ATU028 304	ATL8C2 2227:1 ..1067	nap				ATL8C2 2227:2 7..788	0.68		g42621 62	68	499	4.2e- 50	na] (AC005 275) putati ve glycos ylatio n enzyme [Arabi dopsis thalia na]
166365	ATU028 305	ATL8C2 2162:1 866..1	nap				ATL8C2 2162:1 866..7 0	0.68		g29612 83	68	1338	5.3e- 120	(Y1684 8) LG27/3 0 [Arabi dopsis thalia na]
166366	ATU028 306	ATL8C2 3759:1 ..5212	nap				ATL8C2 3759:5 7..498 3	0.68		g40380 56, g42637 66, g46999 38	68, 64, 48	2239, 1366, 587	1.5e- 208, 1.2e- 124, 5.5e- 60	(AC005 897) putati ve transp oson [Arabi dopsis thalia na]; (AC006 218) hypoth etical protei n [Arabi dopsis thalia

166367	ATU028 307	ATL8C2 2312:2 030..1	nap						0.68	g43253 48	68	188	5.2e- 10	na] (AC007 166) hypoth etical protei n [Arabi dopsis thalia na]
									ATL8C2 2312:1 388..2 11					(AF128 394) contai ns simila rity to phosph ate transp orters [Arabi dopsis thalia na]
166368	ATU028 308	ATL8C2 289:19 41..15 9	nap						0.68	g33778 16	68	1283	1.9e- 116	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son
									ATL8C2 289:12 69..50 4					

166369	ATU028 309	ATL8C2 1774:5 012..1	nap						ATL8C2 1774:4 965..1 369	0.66	g33193 60	68	2423	1.1e- 238	Athila (GB:X8 1801) [Arabi dopsis thalia na] (AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
166370	ATU028 310	ATL8C4 9324:4 992..2 931	nap						ATL8C4 9324:4 929..3 009	0.66	g33778 16	68	2691	8.7e- 227	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot

166371	ATU028 311	ATL8C1 811:95 5..228	nap							ATL8C1 811:76 2..228	0.64	g42630 55	68	257	6.6e- 25	ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia nal]
166372	ATU028 312	ATL8C8 807:65 8..199 3	nap							ATL8C8 807:65 8..162 1	0.63	g48369 01	68	821	1.7e- 86	(AC007 369) Unknow n protei n [Arabi dopsis thalia nal]
166373	ATU028 313	ATL8C4 7870:1 ..1997	nap							ATL8C4 7870:5 3..190 9	0.61	g33778 30	68	1481	1.5e- 146	(AF075 598) contai ns simila rity to Aplysi a califo rnica

166374	ATU028 314	ATL8C2 2893:1 ..772	nap					ATL8C2 2893:2 39..73 8	0.61	g38941 88	68	101	5.0e- 10	intermediate filament protein A (GB:X60297) [Arabidopsis thaliana]
166375	ATU028 315	ATL8C1 4473:1 ..868	nap					ATL8C1 4473:6 3..803	0.58	g30048 82	68	373	2.9e- 29	(AF030304) zinc finger protein; ATZF1 [Arabidopsis thaliana]
166376	ATU028 316	ATL8C2 6049:5 5..168 1	nap					ATL8C2 6049:5 5..162 0	0.57	g43887 23	68	632	7.4e- 57	(AC006413) hypothetical protein [Arabidopsis thaliana]

166377	ATU028 317	ATL8S2 0695:6 01..3	nap					ATL8S2 0695:5 57..60	0.54	g23377 96	68	225	1.4e- 21	dopsis thalia na] (Y1393 7) YloC protei n [Bacil lus subtil is]
166378	ATU028 318	ATL8C3 9893:4 174..2 320	nap					ATL8C3 9893:4 112..2 359	0.53	g45672 98	68	1896	1.0e- 194	(AC006 918) putati ve MuDR MURA transp osase [Arabi dopsis thalia na]
166379	ATU028 319	ATL8C1 7408:4 721..1	nap					ATL8C1 7408:4 531..1 107	0.52	g37460 69, g37790 21	68, 33	2479, 1456	3.7e- 249, 3.3e- 142	(AC005 311) putati ve revers e transc riptas e [Arabi dopsis thalia na]; (AC005 171) putati

166380	ATU028 320	ATL8C9 308:19 61..1	nap							ATL8C9 308:17 99..85 2	0.52		g47739 20, g21296 18	68, 46	1935, 495	7.3e- 180, 1.1e- 51	ve revers e transc riptas e [Arabi dopsis thalia na]
166381	ATU028 321	ATL8C1 7004:3 055..1	nap							ATL8C1 7004:2 929..2	0.51		g39246 09	68	3139	0.0	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]; hypoth etical protei n 1 - Arabid opsis thalia na retrot ranspo son Athila [Arabi dopsis thalia na]
																	(AF069 442) putati

166382	ATU028 322	ATL8S7 470:99 ..524	nap							17	ATL8S7 470:27 5..448	0.51	g14033 8	68	480	9.7e- 41	ve polypr otein of LTR transp oson [Arabi dopsis thalia na]
166383	ATU028 323	ATL8C2 3345:1 984..1	nap								ATL8C2 3345:1 923..1 29	0.50	g47739 08	68	1642	1.5e- 151	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
166384	ATU028 324	ATL8S6 693:1. .581	nap								ATL8S6 693:16 8..395	0.49	g28030 1	68	432		beta- hydrox ybutyr yl-CoA dehydr

166385	ATU028 325	ATL8C1 9937:2 32..90 7	nap						ATL8C1 9937:2 81..86 6	0.48	g30592 51	68	175	2.4e- 19	(AB010 432) HAPE [Asper gillus oryzae]	ogenas e, NAD- depend ent (EC 1.1.1. -) - Clostr idium acetob utylic um [Clostr idium acetob utylic um] [Clostr idium acetob utylic um]
166386	ATU028 326	ATL8S2 2765:4 71..1	nap						ATL8S2 2765:4 71..93	0.48	g11755 67	68	417	2.7e- 38	HYPOTH ETICAL PROTEI N HI0374 [Haemo philus influe nzae Rd]	
166387	ATU028 327	ATL8S2 3135:4 77..1	nap						ATL8S2 3135:4 14..16	0.47	g17067 56	68	153	7.2e- 16	3- OXOACY L- [Vibri o	

166388	ATU028 328	ATL8C3 0419:5 2..202 2	nap					ATL8C3 0419:5 2..133 7	0.47		g47739 20	68	2024	2.8e- 182	harvey ij (AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]
166389	ATU028 329	ATL8C4 8514:5 184..6 794	nap					ATL8C4 8514:5 184..6 751	0.46		g32427 13	68	2544	5.7e- 223	(AC003 040) putati ve transp osase [Arabi dopsis thalia na]
166390	ATU028 330	ATL8C9 651:12 42..1	nap					ATL8C9 651:11 63..20 7	0.46		g34200 50	68	684	7.0e- 67	(AC004 680) hypoth etical protei n [Arabi dopsis thalia na]
166391	ATU028 331	ATL8C4 1378:5 93..26 02	nap					ATL8C4 1378:5 93..25 49	0.44		g40380 56	68	2289	4.4e- 224	(AC005 897) putati ve transp oson [Arabi

166392	ATU028 332	ATL8C2 31:243 0..1	nap					ATL8C2 31:184 8..820	0.42	g40380 56	68	2100	1.9e- 195	dopsis thalia na] (AC005 897) putati ve transp oson [Arabi dopsis thalia na]
166393	ATU028 333	ATL8C3 9457:1 394..1	nap					ATL8C3 9457:1 295..1 10	0.40	g30333 92	68	1667	9.3e- 146	(AC004 238) putati ve transl ation initia tion factor EIF- 2B- epsilo n subuni t [Arabi dopsis thalia na]
166394	ATU028 334	ATL8C2 0301:1 329..1 995	nap							g13512 22	68	337	3.0e- 35	TRANSC RIPTIO N INITIA TION FACTOR IIB (TFIIB

166395	ATU028 335	ATL8C2 3498:1 ..1608	nap										g34260 39	68	919	1.6e- 102	(AC005 168) unknown protein [Arabi dopsis thalia na]
166396	ATU028 336	ATL8C3 3232:5 51..1	nap										g38314 58	68	537	2.6e- 42	(AC005 700) hypoth etical protein [Arabi dopsis thalia na]
166397	ATU028 337	ATL8C1 340:27 28..15 08	nap										g27696 42	68	1275	3.9e- 133	(Z9721 5) nine- cis- epoxyc aroten oid dioxyg enase [Lycop ersico n escule ntum]
166398	ATU028 338	ATL8S1 5887:1	nap										g31283 02	68	230	1.2e- 20	(AF010 496)

166399	ATU028 339	ATL8C2 0440:1 ..186	nap										g28275 57	68	247	1.2e- 21	(AL021 635) hypoth etical protei n [Arabi dopsis thalia na]
166400	ATU028 340	ATL8C4 3919:9 68..13 11	nap										g47340 12	68	212	2.4e- 18	(AC007 112) hypoth etical protei n [Arabi dopsis thalia na]
166401	ATU028 341	ATL8C3 9612:6 116..2 170	nap										g44173 09	68	2174	4.3e- 212	(AC006 446) putati ve pol ypr otei n with a revers e transc riptas e

166407	ATU028 347	ATL8C3 9102:1 169..1 72	nap									g44544 77	68	230	7.3e- 26	(AC006 234) hypoth etical protei n [Arabi dopsis thalia na]
166408	ATU028 348	ATL8S8 267:1. .534	nap									g34150 13	68	374	4.8e- 34	(AF080 548) 3- hydrox ybutyr ate dehydr ogenas e [Sinor hizobi um melilo ti]
166409	ATU028 349	ATL8S2 5576:4 93..1	nap						ATL8S2 5576:4 75..9	1.00		g38113 10	67	261	5.3e- 22	(AF047 974) unknow n [Vibri o choler ae]
166410	ATU028 350	ATL8C4 7161:1 591..3 754	nap									g33675 26	68	266	1.2e- 29	(AC004 392) Strong simila rity to [Arabi dopsis]

166415	ATU028 355	ATL8C1 1400:5 90..14 63	nap								g45879 97	68	474	1.5e- 48	(AF085 279) hypoth etical protei n [Arabi dopsis thalia na]
166416	ATU028 356	ATL8C2 8877:1 953..1 083	nap								g37860 13	68	546	5.2e- 53	(AC005 499) hypoth etical protei n [Arabi dopsis thalia na]
166417	ATU028 357	ATL8C4 5470:3 141..3 551	nap								g23427 25	68	510	2.9e- 41	(AC002 341) hypoth etical protei n [Arabi dopsis thalia na]
166418	ATU028 358	ATL8C1 1332:2 943..8 46	nap								g42635 43	68	1895	4.6e- 184	(AC006 250) putati ve Athila retroeo lement -ORF1 protei n

166426	ATU028 366	ATL8C3 8769:8 69..46 7	nap									g36680 85	68	286	2.3e- 21	n [Arabi dopsis thalia na] (AC004 667) hypoth etical protei n [Arabi dopsis thalia na]
166427	ATU028 367	ATL8S5 913:19 3..499	nap									g29842 67	68	198	6.8e- 13	(AE000 769) riboso mal protei n L09 [Aquif ex aeolic us]
166428	ATU028 368	ATL8C3 7724:1 446..1	nap								ATL8C3 7724:1 428..6 3	g39246 12	67	1256	4.5e- 144	(AF069 442) mitoch ondria l elonga tion factor Tu [Arabi dopsis thalia na]
166429	ATU028 369	ATL8C3 7155:5	nap								ATL8C3 7155:5	g45196 71	67	243		(AB017 693)

166430	ATU028 370	285..4 331	nap				139..4 419	0.95	g35102 62	67	575	2.7e- 66	transf actor [Nicot iana tabacu m] (AC005 310) NAM like protei n [Arabi dopsis thalia nal]
166431	ATU028 371	ATL8C1 9901:1 641..1	nap				ATL8C1 9901:1 453..1 28	0.95	g45444 46	67	690	1.7e- 60	(AC006 592) hypoth etical protei n [Arabi dopsis thalia nal]
166432	ATU028 372	ATL8S1 875:19 9..518	nap				ATL8S1 875:19 9..438	0.95	g25982 23	67	340	1.2e- 30	(Y0869 6) aldehy de dehydr ogenas e subuni t III [Aceto bacter europa eus]
166433	ATU028	ATL8S1	nap				ATL8S1	0.95	g16518	67	252	1.0e-	(D9090

	373	3716:1 12..57 2						3716:1 54..41 7	0.94		72				16	0) spore matura tion protei n B [Synec hocyst is sp.]
166434	ATU028 374	ATL8C2 0725:1 101..1	nap					ATL8C2 0725:1 098..6 9	0.94		g38105 93	67	1549		4.9e- 146	(AC005 398) putati ve sucros e- proton sympor ter [Arabi dopsis thalia na]
166435	ATU028 375	ATL8C4 9363:1 546..1	nap					ATL8C4 9363:1 477..3 4	0.93		g45444 38	67	669		4.0e- 49	(AC006 592) hypoth etical protei n [Arabi dopsis thalia na]
166436	ATU028 376	ATL8C1 2370:1 519..1	nap					ATL8C1 2370:1 519..5 5	0.92		g30471 14	67	729		1.4e- 79	(AF058 919) No defini tion line found

166437	ATU028 377	ATL8C4 6587:1 ..1212	nap				ATL8C4 6587:2 86..76 2	0.91	g45875 77	67	545	2.1e- 61	[Arabi dopsis thalia na] (AC006 550) F1003. 17 [Arabi dopsis thalia na]
166438	ATU028 378	ATL8C2 1863:1 ..1082	nap				ATL8C2 1863:4 6..108 2	0.90	g42622 10	67	729	5.2e- 59	(AC006 161) simila r to leucin e zipper transc riptio n factor [Arabi dopsis thalia na]
166439	ATU028 379	ATL8C4 6070:7 06..18 7	nap				ATL8C4 6070:6 03..23 2	0.90	g35402 02	67	793	3.3e- 72	(AC004 260) Hypoth etical protei n [Arabi dopsis thalia na]
166440	ATU028 380	ATL8C3 79:1.. 1430	nap				ATL8C3 79:90.. .1430	0.89	g45393 18	67	1483	5.1e- 120	(AL035 679) putati

166441	ATU028 381	ATL8C1 3967:7 47..1	nap						ATL8C1 3967:4 83..40 4	0.88		g35229 52	67	750	2.9e- 67	(AC004 411) putati ve alcohol dehydr ogenase [Arabi dopsis thalia na]
166442	ATU028 382	ATL8C4 9776:2 955..1	nap						ATL8C4 9776:2 901..2 05	0.88		g44552 40	67	1603	6.3e- 143	(AL035 523) putati ve protei n [Arabi dopsis thalia na]
166443	ATU028 383	ATL8C3 0505:1 ..2865	nap						ATL8C3 0505:1 142..2 853	0.87		g29613 52	67	369	3.6e- 19	(AL022 140) putati ve protei n [Arabi

166444	ATU028 384	ATL8C4 8766:1 ..1121	nap					ATL8C4 8766:6 9..112 1	0.86	g58486 5	67	722	2.6e- 79	CYTOCH ROME P450 76A2 (CYPLX XVIA2) (P- 450EG7) [Solan um melong ena]	dopsis thalia na]
166445	ATU028 385	ATL8C4 3856:1 054..2 41	nap					ATL8C4 3856:9 19..31 2	0.85	g31767 24	67	682	2.5e- 73	(AC002 392) hypoth etical protei n [Arabi dopsis thalia na]	
166446	ATU028 386	ATL8C3 2948:2 54..12 01	nap					ATL8C3 2948:2 54..12 01	0.85	g33193 49	67	200	8.6e- 20	(AF077 407) No defini tion line found [Arabi dopsis thalia na]	
166447	ATU028 387	ATL8C2 9692:6 33..1	nap					ATL8C2 9692:4 35..18	0.84	g47739 11	67	394	4.0e- 33	(AF147 259) No	

									0							definition line found [Arabi dopsis thaliana]
166448	ATU028 388	ATL8C3 3423:4 97..25 25	nap						ATL8C3 3423:4 97..24 57	0.84	g42621 59	67	1598	2.1e- 117	(AC005 275) hypothetical protein [Arabi dopsis thaliana]	
166449	ATU028 389	ATL8C4 8542:6 117..9 027	nap						ATL8C4 8542:6 117..8 908	0.84	g27358 41	67	868	6.6e- 77	(AF010 283) No definition line found [Sorghum bicolor]	
166450	ATU028 390	ATL8C3 2252:1 ..2294	nap						ATL8C3 2252:1 54..21 76	0.84	g45394 14	67	1937	2.3e- 180	(AL049 524) putative subtilisin- like protease [Arabi dopsis]	

166451	ATU028 391	ATL8C4 5797:1 ..4116	nap				ATL8C4 5797:3 849..3 450	0.83	g22583 17	67	905	3.4e- 101	thalia nal (AF004 879) resist ance comple x protei n I2C- 2 [Lycop ersico n escul entum]
166452	ATU028 392	ATL8C3 8055:2 178..1	nap				ATL8C3 8055:2 178..3 17	0.83	g22451 29	67	96	1.5e- 07	(Z9734 4) hypoth etical protei n [Arabi dopsis thalia nal]
166453	ATU028 393	ATL8S1 7019:5 38..1	nap				ATL8S1 7019:5 00..47	0.83	g32615 91	67	308	3.4e- 23	(Z7402 5) fabG3 [Mycob acteri um tuberc ulosis]
166454	ATU028 394	ATL8C4 977:65 06..22 97	nap				ATL8C4 977:63 85..22 97	0.83	g11770 22	67	1358	8.8e- 118	HYPOTH ETICAL PROTEI N KIAA00

166455	ATU028 395	ATL8C1 9205:8 4..212 2	nap				ATL8C1 9205:1 88..20 55	0.80	g45665 05	67	907	3.6e- 88	52 [] (AF102 868) beta- D- glucan exohyd rolase isoenz yme ExoI [Horde um vulgar e]
166456	ATU028 396	ATL8C8 202:1. .1622	nap				ATL8C8 202:44 ..1622	0.79	g22448 60	67	578	2.0e- 72	(Z9733 7) cucumi sin [Arabi dopsis thalia na]
166457	ATU028 397	ATL8C4 0701:7 9..872	nap				ATL8C4 0701:7 9..796	0.78	g13635 28	67	1034	5.1e- 100	gag protei n - maize [Zea mays]
166458	ATU028 398	ATL8C1 465:65 3..1	nap				ATL8C1 465:60 2..73	0.78	g44903 00	67	949	5.4e- 98	(AL035 678) putati ve protei n [Arabi dopsis thalia na]
166459	ATU028	ATL8C2	nap				ATL8C2	0.78	g45672	67	142	8.5e-	(AC006

	399	0634:1 636..1 156						0634:1 526..1 185		72			09	841) hypothesis protein [Arabidopsis thaliana]
166460	ATU028 400	ATL8C1 6630:1 009..3 433	nap					ATL8C1 6630:1 009..3 273	0.76	g31766 59	67	1952	1.1e- 154	(AC004 393) Strong similarity to receptor kinase gb M80 238 from A. thaliana. [Arabidopsis thaliana]
166461	ATU028 401	ATL8C6 493:22 86..1	nap					ATL8C6 493:22 14..29	0.76	g28333 84	67	1839	8.1e- 206	GLYCOGEN (STARCH) SYNTHASE PRECURSOR (GBSSI I) (GRANULE- LE-

166462	ATU028 402	ATL8S2 2251:1 ..588	nap					ATL8S2 2251:5 5..572	0.76	g13606 05	67	330	2.0e- 29	(Z4880 1) ORF3 [Synec hococc us PCC794 2]
166463	ATU028 403	ATL8C2 0565:4 423..1 85	nap					ATL8C2 0565:4 402..1 85	0.75	g42630 62	67	431	1.9e- 40	(AC005 142) hypoth etical protei n [Arabi dopsis thalia nal]
166464	ATU028 404	ATL8S2 437:66 8..4	nap					ATL8S2 437:62 1..10	0.74	g32532 02	67	774	2.9e- 72	(AF029 714) PhaF [Pseud omonas putida]
166465	ATU028 405	ATL8S2 6637:4 65..13 3	nap					ATL8S2 6637:4 02..13 3	0.74	g98797	67	197	10K antige n - Mycoba cteriu m tuberc ulosis	

166466	ATU028 406	ATL8C4 0092:1 ..1336	nap					ATL8C4 0092:1 41..10 58	0.74	g22447 78	67	950	7.0e- 73	(Z9733 5) hypoth etical protei n [Arabi dopsis thalia na]
166467	ATU028 407	ATL8C2 3724:1 ..1796	nap					ATL8C2 3724:9 9..165 0	0.74	g40068 86	67	972	6.3e- 81	(Z9970 8) putati ve protei n [Arabi dopsis thalia na]
166468	ATU028 408	ATL8C2 4272:3 219..8 77	nap					ATL8C2 4272:3 199..8 77	0.72	g43253 66	67	2881	3.4e- 294	(AF128 396) simila r to maize transp oson MuDR- like protei ns [Arabi dopsis thalia na]
166469	ATU028 409	ATL8S1 3902:1	nap					ATL8S1 3902:1	0.70	g24944 01	67	263	7.9e- 25	ELECTR ON

166471	ATU028 411	ATL8S2 5270:4 32..1	nap						ATL8S2 5270:4 32..29 4	0.69		g38205 09	67	193	1.7e- 15	(AF061 446) unknown [Chrom obacte rium violac eum]	ichia coli []
166472	ATU028 412	ATL8S1 8144:5 55..1	nap						ATL8S1 8144:5 55..11	0.69		g29096 48	67	162	1.7e- 13	(AL021 943) echA5 [Mycob acteri um tuberc ulosis]	
166473	ATU028 413	ATL8C2 203:59 95..38 80	nap						ATL8C2 203:58 39..40 88	0.69		g33778 30, g43097 05	67, 34	1395, 217	4.4e- 127, 1.7e- 18	(AF075 598) contai ns simila rity to Aplysi a califo rnica interm ediate filame nt protei n A (GB:X6 0297)	

166474	ATU028 414	ATL8C4 1123:1 ..335	nap						ATL8C4 1123:4 8..282	0.66	g28298 98	67	469	7.4e- 47	[Arabi dopsis thalia nal; (AC006 266) putati ve Athila -like protei n [Arabi dopsis thalia nal]
166475	ATU028 415	ATL8C2 1301:7 272..8 561	nap						ATL8C2 1301:7 272..8 255	0.65	g27085 24, g45861 06	67, 34	116, 344	1.9e- 17, 9.5e- 64	(AF038 649) simila r to resist ance gene; region between n conser ved kinase -2 and

166476	ATU028 416	ATL8C4 145:12 75..1	nap						ATL8C4 145:12 75..19	0.64	g46893 34	67	104	8.3e- 06	P-Loop domains [Pinus radiat al; (AL049 638) putati ve diseas e resist ance protei n (TMV N- like) [Arabi dopsis thalia nal] (AF132 555) BcDNA. GM0765 9 [Droso phila melano gaster]
166477	ATU028 417	ATL8C1 2710:1 ..1729	nap						ATL8C1 2710:5 76..15 01	0.63	g42638 30	67	1245	2.9e- 103	(AC006 067) hypoth etical protei n [Arabi dopsis]

166478	ATU028 418	ATL8C1 5409:1 ..1867	nap					ATL8C1 5409:1 15..13 73	0.59	g49144 02	67	209	1.3e- 17	thalia na] (AL050 352) hypoth etical protei n [Arabi dopsis thalia na]
166479	ATU028 419	ATL8C3 0795:1 ..1296	nap					ATL8C3 0795:1 97..12 96	0.54	g19030 34	67	959	4.6e- 90	(X9462 5) amp- bindin g protei n [Brass ica napus]
166480	ATU028 420	ATL8C2 0793:1 142..2 38	nap					ATL8C2 0793:9 99..23 8	0.53	g37639 36	67	1187	2.3e- 121	(AC004 450) putati ve myb- relate d transc riptio n factor [Arabi dopsis thalia na]
166481	ATU028 421	ATL8C2 5752:4 6..189	nap					ATL8C2 5752:4 6..175	0.53	g43226 70	67	119	0.995	(AF094 508) dentin

166482	ATU028 422	ATL8C3 7228:2 28..97 5	nap					4	0.50	g44067 68	67	426		phosphoryn [Homo sapien s]
166483	ATU028 423	ATL8C1 759:17 24..12 6	nap					ATL8C3 7228:2 28..84 8	0.49	g47739 20	67	1309	9.5e- 141	(AC006 836) putati ve flavon ol sulfot ransfe rase [Arabi dopsis thalia na]
166484	ATU028 424	ATL8C4 6969:1 490..4 146	nap					ATL8C1 6969:1 490..3 802	0.47	g44163 01	67	2507	2.5e- 219	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]
166485	ATU028 425	ATL8C1 741:15 76..1	nap					ATL8C1 741:10 10..23 0	0.44	g43253 48	67	376	5.9e- 31	(AF105 716) gag protei n [Zea mays] (AF128 394) contai ns

166486	ATU028 426	ATL8C2 824:13 06..56 4	nap						ATL8C2 824:12 60..56 4	0.44	g34137 06	67	434	1.6e- 43	(AC004 747) hypoth etical protei n [Arabi dopsis thalia na]
166487	ATU028 427	ATL8S5 293:21 ..520	nap						ATL8S5 293:21 ..135	0.43	g28087 83	67	189	6.1e- 16	(AL021 411) hypoth etical protei n SC7H1. 25c [Strep tomyce s coelic olor]
166488	ATU028 428	ATL8C4 8787:8 40..22 15	nap						ATL8C4 8787:1 151..2 207	0.43	g45875 77	67	427	5.2e- 50	(AC006 550) F1003. 17 [Arabi dopsis

166492	ATU028 432	ATL8C2 1691:3 509..5 7	nap				ATL8C2 1691:3 509..5 7	0.40	g33778 34	67	1275	9.3e- 114	(AF075 598) NO defini tion line found [Arabi dopsis thalia na]
166493	ATU028 433	ATL8C2 316:28 73..38 3	nap				ATL8C2 316:26 55..12 52	0.40	g37460 69	67	2361	1.1e- 224	(AC005 311) putati ve revers e transc riptas e [Arabi dopsis thalia na]
166494	ATU028 434	ATL8S2 9580:1 28..63 4	nap						g45389 71	67	113	2.4e- 12	(AL049 488) putati ve protei n [Arabi dopsis thalia na]
166495	ATU028 435	ATL8S5 383:18 1..375	nap						g76277	67	120	0.0002 6	hypoth etical 11K protei n (inser

166496	ATU028 436	ATL8S1 6349:5 12..25 0	nap									g44173 02	67	356	1.3e- 07	(AC006 446) hypoth etical protei n [Arabi dopsis thalia na]	tion seque IS1) - Escher ichia coli []
166497	ATU028 437	ATL8C4 342:20 36..60 2	nap									g46783 48	67	945	6.2e- 103	(AL049 659) putati ve protei n [Arabi dopsis thalia na]	
166498	ATU028 438	ATL8C4 3464:1 163..1	nap									g18711 79	67	201		(U9043 9) FMRFam ide precu sor isolog [Arabi dopsis thalia na]	
166499	ATU028	ATL8S2	nap									g35137	67	774	4.0e-	(AF080	

	439	7496:1 ..575								26				66	118) F8M12. 23 gene produc t [Arabi dopsis thalia na]
166500	ATU028 440	ATL8C4 9615:1 ..1636	nap							g33675 32	67	1796	7.5e- 189	(AC004 392) Strong simila rity to unknow n protei n T28M21 .21 [Arabi dopsis thalia na]	
166501	ATU028 441	ATL8C8 301:20 74..24 69	nap							g40380 66	67	418	4.5e- 11	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]	
166502	ATU028 442	ATL8C3 3926:1 174..1	nap							g22448 38	67	533	(Z9733 7) hypoth etical		

166503	ATU028 443	ATL8C4 3524:7 73..1	nap										g27087 51	67	347		protein [Arabi dopsis thalia na]
166504	ATU028 444	ATL8C4 1037:7 83..1	nap										g45858 84	67	270	6.2e- 27	(AC005 850) Hypoth etical protein [Arabi dopsis thalia na]
166505	ATU028 445	ATL8C4 9541:1 ..233	nap										g47259 52	67	356	4.5e- 31	(AL049 730) AIR1A- like protein [Arabi dopsis thalia na]
166506	ATU028 446	ATL8C1 0833:2 440..3 76	nap										g45899 61, g30045 55	67, 37	342, 359	5.5e- 38, 3.0e- 36	(AC007 169) unknown

166509	ATU028 449	ATL8C4 385:68 7..1	nap										g28084 38	67	687	4.7e- 63	445 from Solana m pimpin ellifol ium. [Arabi dopsis thalia na]
166510	ATU028 450	ATL8S2 691:40 0..1	nap										g13635 9	67	337	6.3e- 30	(X7969 4) bg4 [Arabi dopsis thalia na] ANTHRA NILATE SYNTHA SE COMPO NENT II (GLUTA MINE AMIDO- TRANSF ERASE) [Pseud omonas aerugi nosa]
166511	ATU028 451	ATL8C4 939:11 2..638	nap										g31842 86	67	163	1.9e- 16	(AC004 136) hypoth etical protein [Arabi dopsis]

166518	ATU028 458	ATL8S2 8748:4 98..1	nap										g24927 67	67	453	1.2e- 35	PUTATI VE SHORT- CHAIN TYPE DEHYDR OGENAS E/REDU CTASE Y4MP [Rhizo bium sp. NGR234]	GNTR- GGT INTERG ENIC REGION (F231) [Esche richia coli]
166519	ATU028 459	ATL8S7 161:1. .545	nap										g48083 54	67	303	4.6e- 17	(AL049 841) putati ve estera se [Strep tomyce s coelic olor]	
166520	ATU028 460	ATL8C2 999:1. .960	nap										g45824 61	67	993	2.7e- 102	(AC007 071) putati ve triacy	

166534	ATU028 474	ATL8S2 1762:5 46..17 2	nap					ATL8S2 1762:4 03..17 2	0.99	g24401 81	66	241	1.2e- 19	dopsis thalia na]
166535	ATU028 475	ATL8C1 6616:1 009..1	nap					ATL8C1 6616:1 003..7 3	0.99	g48503 83	66	881	2.5e- 79	(Z9953 1) 40s riboso ma protei n [Schiz osacch aromyc es pombe]
166536	ATU028 476	ATL8C4 8987:2 290..1 911	nap					ATL8C4 8987:2 290..1 911	0.99	g45147 16	66	258	6.8e- 19	(AC007 357) Contai ns simila rity to []
166537	ATU028 477	ATL8C7 451:11 25..64 5	nap					ATL8C7 451:10 64..64 5	0.98	g34618 27	66	311	3.7e- 17	(AB017 533) EPC [Nicot iana tabacu m]
														(AC004 138) putati ve diseas e resist ance protei n [Arabi dopsis

166538	ATU028 478	ATL8C3 5256:1 ..1413	nap				ATL8C3 5256:2 78..14 10	0.97	g31932 92	66	512	1.1e- 42	thalia nal (AF069 298) simila r to ATPase s associ ated with variou s cellul ar activi tes (Pfam: AAA.hm m, score: 230.91) [Arabi dopsis thalia nal
166539	ATU028 479	ATL8C1 3017:2 897..4 583	nap				ATL8C1 3017:3 393..4 564	0.93	g31579 43	66	647	9.0e- 36	(AC002 131) Contai ns simila rity to BAP31 protei n gb X81 816 from

166540	ATU028 480	ATL8S2 9065:4 87..1	nap					ATL8S2 9065:4 87..10	0.92	g16526 45	66	220	1.1e- 14	Mus muscul us. [Arabi dopsis thalia na]
														(D9090 7) phosph oglyco late phosph atase [Synec hocyst is sp.]
166541	ATU028 481	ATL8C3 2120:7 12..19 8	nap					ATL8C3 2120:7 12..19 8	0.92	g43712 95	66	478	1.7e- 43	(AC006 260) putati ve CCAAT- bindin g transc riptio n factor [Arabi dopsis thalia na]
166542	ATU028 482	ATL8C3 7298:1 072..2 98	nap					ATL8C3 7298:1 027..3 13	0.89	g34510 78	66	378		(AL031 326) putati ve protei n [Arabi

166543	ATU028 483	ATL8S2 0199:1 ..484	nap					ATL8S2 0199:1 34..48 4	0.85	g45844 94	66	279	3.2e- 11	dopsis thalia na] (AL049 587) hypoth etical protein [Strep tomyces coelic olor]
166544	ATU028 484	ATL8S2 6875:3 26..1	nap					ATL8S2 6875:3 26..13 2	0.85	g31228 18	66	252		30S RIBOSO MAL PROTEI N S6 [Neiss eria gonorr hoeae]
166545	ATU028 485	ATL8C3 2303:1 02..10 33	nap					ATL8C3 2303:1 02..56 8	0.83	g23203 1	66	290	3.3e- 08	ELONGA TION FACTOR 1 BETA' [Oryza sativa]
166546	ATU028 486	ATL8C1 2798:1 895..1	nap					ATL8C1 2798:1 895..8 12	0.83	g35401 88	66	1551	7.7e- 141	(AC004 122) Hypoth etical protein [Arabi dopsis thalia

166547	ATU028 487	ATL8C3 0879:1 89..58 6	nap				ATL8C3 0879:1 89..58 6	0.82	g41057 94	66	136	0.092	na] (AF049 928) PGP224 [Petun ia x hybrid a]
166548	ATU028 488	ATL8C4 2355:1 065..1	nap				ATL8C4 2355:9 99..48 6	0.81	g31933 21	66	513	1.5e- 56	(AF069 299) No defi nition line found [Arabi dopsis thalia na]
166549	ATU028 489	ATL8C3 2625:1 709..4 67	nap				ATL8C3 2625:1 650..4 67	0.81	g45860 53	66	1852	3.4e- 175	(AC007 020) putati ve lacass e [Arabi dopsis thalia na]
166550	ATU028 490	ATL8C1 1772:1 208..1	nap				ATL8C1 1772:1 180..9 0	0.81	g45393 01	66	810	4.6e- 78	(Al049 480) putati ve mitoch ondria l protei n [Arabi dopsis

166551	ATU028 491	ATL8C2 4414:1 913..1 18	nap				ATL8C2 4414:1 615..1 18	0.80	g48877 54	66	1140	1.4e- 97	thalia na] (AC006 533) unknown n protei n [Arabi dopsis thalia na]
166552	ATU028 492	ATL8C1 7102:1 ..1293	nap				ATL8C1 7102:1 55..11 31	0.80	g48352 44	66	693	4.8e- 60	(AL049 862) putati ve mitoch ondria l protei n [Arabi dopsis thalia na]
166553	ATU028 493	ATL8C3 4276:1 ..1734	nap				ATL8C3 4276:1 94..16 71	0.79	g46801 80	66	1604	6.2e- 160	(AF111 709) polypr otein [Oryza sativa subsp. indica]
166554	ATU028 494	ATL8C1 5954:2 223..1	nap				ATL8C1 5954:2 223..2 35	0.79	g21905 45	66	1273	1.9e- 91	(AC001 229) Simila r to Zea mays

166555	ATU028 495	ATL8C1 0769:3 17..15 21	nap					ATL8C1 0769:3 78..14 23	0.79	g22450 13	66	1323	1.4e- 129	(Z9734 1) hypoth etical protei n [Arabi dopsis thalia na]
166556	ATU028 496	ATL8C3 1629:2 480..2 5	nap					ATL8C3 1629:2 365..8 8	0.79	g40380 62, g45843 59	66, 38	1239, 142	3.5e- 128, 4.1e- 06	(AC005 897) putati ve transp oson MuDR [Arabi dopsis thalia na]; (AC006 420) hypoth etical protei n [Arabi dopsis thalia na]
166557	ATU028	ATL8S2	nap					ATL8S2	0.78	g12446	66	325	7.0e-	(U4100

497	5947:1 72..62 4					5947:1 72..52 3	53				28	0) gag gene produc t [Zea mays]
166558	ATU028 498	ATL8S2 5053:1 ..570	nap			ATL8S2 5053:1 81..45 7	0.78	g45859 24	66	290	4.3e- 17	(AC007 211) hypoth etical protei n [Arabi dopsis thalia na]
166559	ATU028 499	ATL8C1 0249:2 184..1 7	nap			ATL8C1 0249:2 175..3 93	0.76	g41917 80	66	1007		(AC005 917) putati ve cytoki nin oxidas e [Arabi dopsis thalia na]
166560	ATU028 500	ATL8C4 1756:1 22..75 00	nap			ATL8C4 1756:1 341..7 500	0.76	g25650 07	66	1773	2.4e- 240	(AC002 983) predic ted transp oson protei n [Arabi dopsis thalia na]

166561	ATU028 501	ATL8C1 0767:1 05..10 38	nap				ATL8C1 0767:1 05..10 38	0.75	g32585 76	66	277	4.7e- 30	(U8995 9) Unknown protein [Arabidopsis thaliana na]
166562	ATU028 502	ATL8C3 9803:1 4..679	nap				ATL8C3 9803:1 80..52 9	0.72	g47411 85	66	388	3.7e- 36	(AL049 746) hypothetical protein [Arabidopsis thaliana na]
166563	ATU028 503	ATL8C1 5543:1 ..1342	nap				ATL8C1 5543:9 0..134 2	0.71	g30805 29	66	101	8.0e- 07	(AL022 600) hypothetical protein [Schizosaccharomyces pombe]
166564	ATU028 504	ATL8S1 5410:5 33..1	nap				ATL8S1 5410:5 22..19 3	0.71	g39293 44	66	298	3.9e- 22	CYTOCHROME C1 PRECURSOR [Chromatium vinosum]

166565	ATU028 505	ATL8C1 7613:1 ..817	nap				ATL8C1 7613:4 18..53 4	0.70	g42636 46	66	1024	1.7e- 100	(AC006 136) putati ve TAL- like revers e transc riptas e [Arabi dopsis thalia na]
166566	ATU028 506	ATL8C1 8562:1 ..2102	nap				ATL8C1 8562:2 60..18 18	0.70	g36458 99	66	3339	1.7e- 314	(U6840 8) 5' end not determ ined experi mental ly [Zea mays]
166567	ATU028 507	ATL8C3 9740:7 59..19 2	nap				ATL8C3 9740:6 31..19 2	0.70	g45393 85	66	368	5.6e- 31	(AL035 526) putati ve protei n [Arabi dopsis thalia na]
166568	ATU028 508	ATL8C9 866:1. ..1031	nap				ATL8C9 866:14 0..100 1	0.70	g48352 24	66	618	1.0e- 67	(AL049 862) protei n

166569	ATU028 509	ATL8C3 2919:1 345..1	nap							ATL8C3 2919:1 345..1 48	0.70	g10764 44	66	558	6.0e- 42	cyclin - rape [Brass ica napus]	kinase ATN1 like protei n [Arabi dopsis thalia na]
166570	ATU028 510	ATL8C1 1671:1 113..1 43	nap							ATL8C1 1671:9 06..14 3	0.70	g29807 90	66	316	4.9e- 38	(AL022 197) hypoth etical protei n [Arabi dopsis thalia na]	
166571	ATU028 511	ATL8C3 5270:2 366..1	nap .							ATL8C3 5270:2 366..2 84	0.69	g30471 02	66	822	4.0e- 73	(AF058 919) No defini tion line found [Arabi dopsis thalia na]	
166572	ATU028 512	ATL8C4 3697:7 05..34 91	nap							ATL8C4 3697:2 690..1 788	0.68	g45126 98	66	615		(AC006 569) hypoth etical protei	

166573	ATU028 513	ATL8S2 0404:5 93..18 4	nap				ATL8S2 0404:4 04..18 7	0.68	g29840 29	66	211	1.2e- 19	n [Arabi dopsis thalia na] (AE000 752) ribofl avin syntha se alpha chain [Aquif ex aeolic us]
166574	ATU028 514	ATL8S2 9816:6 09..1	nap				ATL8S2 9816:5 39..10	0.68	g10826 04, g10761 06	66, 39	96, 213	0.71, 2.3e- 22	mucin 5AC (clone JER58) - human (fragm ent) [Homo sapien s]; schC protei n - Strept omyces halste dii [.]
166575	ATU028 515	ATL8C2 3011:1 96..73 2	nap				ATL8C2 3011:1 96..58 6	0.67	g45726 67	66	205	1.3e- 17	(AC006 954) hypoth etical protei

166576	ATU028 516	ATL8C4 2950:5 517..4 38	nap					ATL8C4 2950:4 817..4 38	0.67	g22450 44	66	5295	0.0	n [Arabi dopsis thalia na]
166577	ATU028 517	ATL8C9 216:22 72..85 7	nap					ATL8C9 216:21 73..85 7	0.67	g17527 34	66	1661		(D7851 0) beta- glucan - elicit or recept or [Glyci ne max]

166578	ATU028 518	ATL8C4 8700:5 14..23 07	nap				ATL8C4 8700:6 34..22 17	0.65	g22450 15	66	1340	1.2e- 138	(Z9734 1) unname d protei n produc t [Arabi dopsis thalia na]
166579	ATU028 519	ATL8C1 4013:1 022..2 580	nap				ATL8C1 4013:1 022..2 360	0.65	g13635 28	66	1118	6.2e- 113	gag protei n - maize [Zea mays]
166580	ATU028 520	ATL8C1 2050:1 452..1	nap				ATL8C1 2050:9 67..15 8	0.63	g48072 5	66	1201	1.1e- 127	beta- fructo furano sidase (EC 3.2.1. 26) - Arabid opsis thalia na [Arabi dopsis thalia na]
166581	ATU028 521	ATL8C4 8205:1 ..1206	nap				ATL8C4 8205:6 5..120 0	0.63	g44552 76	66	903	2.3e- 80	(AL035 527) peptid e transp orter- like

166582	ATU028 522	ATL8S2 9269:5 28..14 8	nap					ATL8S2 9269:3 69..14 8	0.60	g16520 32	66	268	1.7e- 24	prote in [Arabi dopsis thalia na] (D9090 2) adenyl ylsulf ate 3- phosph otrans ferase [Synec hocyst is sp.]
166583	ATU028. 523	ATL8C1 0410:1 826..6 870	nap					ATL8C1 0410:1 826..6 695	0.60	g32528 18	66	5083		(AC004 705) hypoth etical protei n [Arabi dopsis thalia na]
166584	ATU028 524	ATL8C4 164:1. .701	nap					ATL8C4 164:95 ..698	0.59	g39803 99	66	639	7.1e- 59	(AC004 561) putati ve tropin one reduct ase [Arabi dopsis thalia na]

166585	ATU028 525	ATL8C1 7232:3 999..1	nap				ATL8C1 7232:9 22..10 , ATL8C1 7232:3 999..1 623	0.58, 0.74	g44327 97	66	1911	7.0e- 178	(AC006 437) putati ve pol polypr oteins [Arabi dopsis thalia na]
166586	ATU028 526	ATL8S1 3689:3 74..1	nap				ATL8S1 3689:3 08..17 3	0.57	g11729 02	66	160	2.1e- 13	REGA PROTEI N [Rhodo bacter capsul atus]
166587	ATU028 527	ATL8C4 8963:1 162..1	nap				ATL8C4 8963:1 098..2 20	0.55	g48357 67	66	238	5.6e- 23	(AC007 202) T8K14. 16 [Arabi dopsis thalia na]
166588	ATU028 528	ATL8C1 2985:1 ..4327	nap				ATL8C1 2985:3 86..35 55	0.55	g45046 29, g31359 94	66, 62	537, 381	1.1e- 61, 5.3e- 48	inhibi tor of kappa light polype ptide gene enhanc er in B- cells, kinase comple x- associ

166589	ATU028 529	ATL8C1 7761:1 127..1 71	nap						ATL8C1 7761:1 024..1 71	0.55	944328 14	66	1123	2.8e- 98	ated protei n; IKAP [Homo sapien s]; (AL023 589) hypoth etical protei n [Schiz osacch aromyc es pombe]
166590	ATU028 530	ATL8S2 6287:5 02..1	nap						ATL8S2 6287:3 98..11	0.54	921171 82	66	325	9.1e- 16	(Z9558 4) hypoth etical protei n Rv1144 [Mycob acteri um tuberc ulosis

166591	ATU028 531	ATL8C4 3455:8 78..30 94	nap				ATL8C4 3455:8 78..25 68	0.49	g33193 62	66	2964		(AF077 408) contai ns simila rity to revers e transc riptas e (Pfam: rvt.hm m, score 19.29) [Arabi dopsis thalia na]
166592	ATU028 532	ATL8C2 9159:1 88..95 1	nap				ATL8C2 9159:5 18..86 3	0.48	g26606 77	66	640	3.0e- 69	(AC002 342) unknow n protei n [Arabi dopsis thalia na]
166593	ATU028 533	ATL8C4 3835:9 55..20 0	nap				ATL8C4 3835:9 23..20 0	0.47	g33778 54	66	908		(AF076 274) No defini tion line found [Arabi

166594	ATU028 534	ATL8C3 0106:8 56..1	nap					ATL8C3 0106:7 90..22 0	0.46		g44552 03	66	748	2.9e- 74	dopsis thalia na]
166595	ATU028 535	ATL8C4 5697:1 209..1	nap					ATL8C4 5697:1 056..9 55	0.46		g30637 10	66	238	5.2e- 25	(AL022 537) putati ve protei n [Arabi dopsis thalia na]
166596	ATU028 536	ATL8C4 5619:2 880..1 906	nap					ATL8C4 5619:2 675..1 906	0.46		g30804 04	66	1445	1.3e- 145	(AL022 603) putati ve protei n [Arabi dopsis thalia na]
166597	ATU028 537	ATL8C1 6497:1 ..622	nap					ATL8C1 6497:6 1..449	0.45		g45394 44	66	422	4.3e- 42	(AL049 523) hypoth etical protei n [Arabi

166598	ATU028 538	ATL8C3 7612:2 58..86 9	nap						0.44	g29822 43	66	219	1.3e- 16	dopsis thalia nal (AF051 204) hypoth etical protei n [Picea marian a]
166599	ATU028 539	ATL8C3 5130:1 616..3 478	nap						0.43	g23927 64	66	1440	3.8e- 133	(AC002 534) hypoth etical protei n [Arabi dopsis thalia nal]
166600	ATU028 540	ATL8C4 1495:7 40..1	nap						0.43	g22450 79	66	210	3.9e- 25	(Z9734 3) hypoth etical protei n [Arabi dopsis thalia nal]
166601	ATU028 541	ATL8C1 146:15 90..1	nap						0.42	g45444 32	66	796	7.2e- 76	(AC006 955) putati ve mannos e-1- phosph ate

166602	ATU028 542	ATL8C3 3415:2 7..763	nap					ATL8C3 3415:3 56..71 4	0.41	g42630 51	66	105	3.8e- 07	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
166603	ATU028 543	ATL8C3 8972:5 54..1	nap							g45389 91	66	53	0.66	(AL049 481) hypoth etical protei n [Arabi dopsis thalia na]
166604	ATU028 544	ATL8C1 4151:9 86..1	nap							g13453 2	66	400	9.3e- 45	S- LOCUS- SPECIF IC GLYCOP ROTEIN S13 PRECUR SOR (SLSG- 13) []
166605	ATU028	ATL8S1	nap					ATL8S1	1.00	g15725	65	538	1.5e-	(U6719

545	5551:2 20..59 9	5551:2 20..59 0	59	41	4) TrbM [Enter obacte r aeroge nes]			
166606	ATU028 546	ATL8C1 3491:1 405..1	nap	g28326 47	66	271	0.38	(AL021 710) hypoth etical protei n [Arabi dopsis thalia na]
166607	ATU028 547	ATL8C3 2168:1 ..1485	nap	g41153 76	66	816	2.1e- 81	(AC005 967) unknow n protei n [Arabi dopsis thalia na]
166608	ATU028 548	ATL8C1 9826:1 ..891	nap	g36953 96	66	801	1.3e- 78	(AF096 372) contai ns simila rity to Arabid opsis thalia na retrot ranspo

166609	ATU028 549	ATL8C8 75:116 5..1	nap										g28326 29	66	1671	2.6e- 173	son Athila (GB:X8 1801) [Arabi dopsis thalia na]
166610	ATU028 550	ATL8C9 836:17 95..97 0	nap										g42636 46	66	230	2.6e- 22	(AL021 711) 4- coumar ate- CoA ligase - like [Arabi dopsis thalia na]
166611	ATU028 551	ATL8C3 5744:3 174..4 423	nap										g49143 81	66	1233	2.3e- 119	(AC006 136) putati ve TA1- like revers e transc riptas e [Arabi dopsis thalia na]
																	(AC007 584) unknow n protei

166612	ATU028 552	ATL8C5 0257:1 669..1	nap										g46801 80	66	1570	2.2e- 145	n [Arabi dopsis thalia na] (AF111 709) polypr oteins [Oryza sativa subsp. indica]
166613	ATU028 553	ATL8C5 0016:1 353..1	nap										g40068 69	66	645	1.4e- 61	(Z9970 7) patati n-like protei n [Arabi dopsis thalia na]
166614	ATU028 554	ATL8C4 5571:8 56..1	nap										g34137 10	66	464	6.4e- 48	(AC004 747) hypoth etical protei n [Arabi dopsis thalia na]
166615	ATU028 555	ATL8S2 4685:3 40..1	nap										g47340 12	66	218	3.1e- 17	(AC007 112) hypoth etical protei n

166616	ATU028 556	ATL8S8 526:21 5..556	nap										g47340 12	66	186	6.0e- 05	(AC007 112) hypoth etical protei n [Arabi dopsis thalia na]
166617	ATU028 557	ATL8C2 9267:6 64..1	nap										g46789 26	66	361	9.1e- 24	(AL049 711) hypoth etical protei n [Arabi dopsis thalia na]
166618	ATU028 558	ATL8C1 2400:8 81..16 62	nap										g45803 96	66	811	6.1e- 41	(AC007 171) hypoth etical protei n [Arabi dopsis thalia na]
166619	ATU028 559	ATL8C1 8011:1 ..584	nap										g21296 55	66	733	1.7e- 73	OBP32p ep protei n - Arabid opsis

166629	ATU028 569	ATL8C3 1718:1 519..3 238	nap										g42630 50	66	316	6.4e- 26	(AC005 142) putati ve noduli n [Arabi dopsis thalia na]	putati ve fizzy- relate d protei n [Arabi dopsis thalia na]
166630	ATU028 570	ATL8C2 6431:8 60..11 60	nap										g30640 39	66	144	1.7e- 11	(AF054 445) major latex protei n homolo g [Mesem bryant hemum crysta llinum]	major latex protei n homolo g [Mesem bryant hemum crysta llinum]
166631	ATU028 571	ATL8C3 4805:7 01..17 6	nap										g39129 26	66	186	9.2e- 15	(AF001 308) drough t- induce	(AF001 308) drough t- induce

166632	ATU028 572	ATL8S1 7957:4 18..22	nap							g46470 7	66	418	1.3e- 36	40S RIBOSO MAL PROTEI N S18 [Arabi dopsis thalia na]
166633	ATU028 573	ATL8S2 8541:5 30..15 5	nap							g28275 27	66	583	1.2e- 47	(AL021 633) auxin induce d like- protei n [Arabi dopsis thalia na]
166634	ATU028 574	ATL8C3 0045:1 544..9 88	nap							g48039 33	66	326	1.1e- 34	(AC006 264) putati ve diseas e resist ance respon se protei n [Arabi

166635	ATU028 575	ATL8C4 7527:4 458..1 820	nap										g44552 94	66	856	7.8e- 91	dopsis thalia nal (AL035 528) putati ve protei n [Arabi dopsis thalia nal]
166636	ATU028 576	ATL8C2 1148:1 891..1	nap										g42622 10	66	1051	2.1e- 86	(AC006 161) simila r to leucin e zipper transc riptio n factor [Arabi dopsis thalia nal]
166637	ATU028 577	ATL8C3 6721:1 523..4 36	nap										g46462 24	66	828	2.0e- 55	(AC007 295) hypo thetical protei n [Arabi dopsis thalia nal]
166638	ATU028 578	ATL8C4 1106:1	nap										g43253 51	66	2618	4.6e- 259	(AF128 394)

166639	ATU028 579	670..1	nap	ATL8C4 5532:1 ..1719	g42638 30	66	1177	5.2e- 100	simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei n (GB:X5 7297) [Arabi dopsis thalia na]
166640	ATU028 580	ATL8S2 9046:5 40..21 5	nap		g33230 63	66	170	2.0e- 14	(AC006 067) hypoth etical protei n [Arabi dopsis thalia na]
166641	ATU028	ATL8C5	nap		g47551	66	376	1.7e-	(AE001 247) polype ptide deform ylase (def) [Trepo nema pallid um]
									(AC007

581	506:1. .967								99				32	018) hypoth etical protei n [Arabi dopsis thalia na]
166642	ATU028 582	ATL8C4 9826:7 70..30 6	nap						g47536 48	66	66	66	0.14	(AL049 751) putati ve protei n [Arabi dopsis thalia na]
166643	ATU028 583	ATL8C4 4749:3 652..4 781	nap						g49268 20	66	321	6.5e- 33	(AC004 135) T17H7. 5 [Arabi dopsis thalia na]	
166644	ATU028 584	ATL8C1 179:54 9..107	nap						g28327 05	66	269	8.1e- 28	(AL021 713) hypoth etical protei n [Arabi dopsis thalia na]	
166645	ATU028 585	ATL8S1 8001:2 ..368	nap						g73088 8	66	84	0.69	OCTAPE PTIDE- REPEAT	

166646	ATU028 586	ATL8C7 212:47 1..45	nap									g20626 37	66	102	0.0002 0	PROTEI N T2 [Mus muscul us] (U8730 7) extrac ytopla smic functi on altern ative sigma factor [Mycob acteri um smegma tis]
166647	ATU028 587	ATL8C2 5249:1 ..822	nap									g40564 18	66	272	1.4e- 27	(AC005 322) T7A14. 5 [Arabi dopsis thalia na]
166648	ATU028 588	ATL8S2 1341:2 34..1	nap									g28275 92	66	109	2.0e- 07	(AL021 646) hypoth etical protei n Rv3182 [Mycob acteri um tuberc

166653	ATU028 593	..2055					7..436	0.96	g23927 65	65	506	7.6e- 42	hypothetical protein [Arabidopsis thaliana] (AC002534)
	ATL8C1 8267:1 818..4 46	nap					ATL8C1 8267:1 617..8 85						hypothetical protein [Arabidopsis thaliana] (AC002534)
166654	ATU028 594	ATL8C2 4321:1 ..985	nap				ATL8C2 4321:2 40..94 1	0.94	g45672 88	65	704	2.2e- 65	unknown protein [Arabidopsis thaliana] (AC006841)
	ATL8C4 9590:1 326..1	nap					ATL8C4 9590:1 262..2 8	0.93	g24628 35	65	1210	7.7e- 123	hypothetical protein [Arabidopsis thaliana] (AF000657)
166655	ATU028 595	ATL8C4 9590:1 326..1	nap				ATL8C4 9590:1 262..2 8	0.93	g24628 35	65	1210	7.7e- 123	hypothetical protein [Arabidopsis thaliana] (AF000657)
166656	ATU028 596	ATL8C4 2972:1	nap				ATL8C4 2972:2	0.93	g38057 69	65	1448	1.8e- 146	(AC005693)

166657	ATU028 597	9..150 3	nap				2..149 7	0.92	g71929 1	65	2432	1.4e- 222	putative mudR- like transp oson [Arabi dopsis thalia na]
							ATL8C2 0602:4 509..6 9						(U1913 4) unknown [Arabi dopsis thalia na]
166658	ATU028 598	ATL8C3 7225:1 680..1	nap				ATL8C3 7225:1 555..4 11	0.92	g25062 76	65	934		RUBISCO SUBUNIT BINDING G- PROTEIN N ALPHA SUBUNIT T PRECUR SOR (60 KD CHAPER ONIN ALPHA SUBUNIT T) (CPN- 60 ALPHA)

166659	ATU028 599	ATL8C2 688:12 60..23 4	nap					ATL8C2 688:94 5..238	0.91	g31933 08	65	133	1.7e- 08	[Arabi dopsis thalia na] (AF069 300) simila r to Medica go trunca tula MtN2 (GB:Y1 5293) [Arabi dopsis thalia na]
166660	ATU028 600	ATL8S1 2231:1 ..525	nap					ATL8S1 2231:5 13..50	0.90	g17231 75	65	406	1.8e- 32	HYPOTH ETICAL 30.2 KD PROTEI N SLL060 1 [Synec hocyst is sp.]
166661	ATU028 601	ATL8C2 3849:1 ..1337	nap					ATL8C2 3849:9 0..133 4	0.88	g48951 89	65	198	4.3e- 19	(AC007 661) unknow n protei n [Arabi dopsis thalia

166662	ATU028 602	ATL8C3 0645:1 ..2818	nap			ATL8C3 0645:3 48..28 18	0.85	g43888 29	65	2635	8.2e- 285	na] (AC006 528) putati ve pol polypr oteins with a Zn- finger CCHC type domain (prosi te:QDO C50158) and a DDE integr ase signat ure motif [Arabi dopsis thalia na]
166663	ATU028 603	ATL8C3 3346:1 706..1	nap			ATL8C3 3346:1 706..2 78	0.84	g42638 30	65	1853	7.5e- 160	(AC006 067) hypoth etical protei n [Arabi dopsis thalia na]
166664	ATU028 604	ATL8C2 4265:1 ..1473	nap			ATL8C2 4265:7 ..975	0.83	g47580 64, g45876	65, 58	159, 131	4.2e- 05, 0.0003	33 kDa transc riptio

166665	ATU028 605	ATL8S2 4484:1 ..266	nap						0.82	g11757 22	65	127	1.4e- 05	nal co- activa tor [Homo sapien sl; (AC006 951) putati ve polyga lactur onase [Arabi dopsis thalia na]
166666	ATU028 606	ATL8C2 07:1.. 1171	nap						0.81	g21911 40	65	495	5.1e- 41	(AF007 269) contai ns weak simila rity to MYB- relate d

166667	ATU028 607	ATL8C1 087:82 5...380 4	nap					ATL8C1 087:82 5...378 0	0.80	945811 10	65	4069	0.0	proteins [Arabidopsis thaliana] (AC005825) putative retrotransposon polyprotein [Arabidopsis thaliana]
166668	ATU028 608	ATL8C3 334:17 88...26 2	nap					ATL8C3 334:17 00...26 2	0.78	g99755	65	1263	2.1e-119	RNA-directed DNA polymerase (EC 2.7.7.49) - Arabidopsis thaliana retrotransposon Ta1-1 (fragment) [Arabidopsis thaliana]

166669	ATU028 609	ATL8C4 956:28 08..1	nap				ATL8C4 956:27 28..20 6	0.77	g45393 45, g45393 46	65, 49	753, 967	2.6e- 78, 2.5e- 66	nal (AL035 539) hypoth etical protein [Arabi dopsis thalia nal; (AL035 539) putati ve protein [Arabi dopsis thalia nal]
166670	ATU028 610	ATL8C2 466:1. .1041	nap				ATL8C2 466:50 ..1041	0.77	g21295 16	65	782	4.2e- 79	1- aminoc yclopr opane- 1- carbox ylate oxidas e homolo g (clone 2A6) - Arabid opsis thalia na [Arabi dopsis

166671	ATU028 611	ATL8C1 6719:1 137..1	nap				ATL8C1 6719:7 98..20 0	0.76		g45444 11	65	1777	3.4e- 177	thalia na] (AC006 955) hypoth etical protei n [Arabi dopsis thalia na]
166672	ATU028 612	ATL8C7 847:1. .712	nap				ATL8C7 847:17 6..711	0.76		g43887 29	65	669	9.0e- 69	(AC006 413) hypoth etical protei n [Arabi dopsis thalia na]
166673	ATU028 613	ATL8C3 0724:1 439..1	nap				ATL8C3 0724:1 369..1 10	0.75		g31231 65	65	377	7.2e- 38	ZINC FINGER PROTEI N 183 [Homo sapien s]
166674	ATU028 614	ATL8C5 774:1. .3536	nap				ATL8C5 774:40 5..353 6	0.74		g45824 62	65	238		(AC007 071) hypoth etical protei n [Arabi dopsis thalia na]
166675	ATU028	ATL8C8	nap				ATL8C8	0.74		g42638	65	1772	1.5e-	(AC006

	615	263:17 10..1							263:17 10..28 8	30				150	067) hypoth etical protei n [Arabi dopsis thalia na]
166676	ATU028 616	ATL8C1 5903:1 ..773	nap					0.73	ATL8C1 5903:5 7..744	g48039 60	65	279	1.3e- 21	(AC006 202) putati ve carbon ic anhydr ase [Arabi dopsis thalia na]	
166677	ATU028 617	ATL8C2 7979:1 ..828	nap					0.73	ATL8C2 7979:5 ..828	g45443 98	65	1141		(AC007 047) hypoth etical protei n [Arabi dopsis thalia na]	
166678	ATU028 618	ATL8C2 1722:1 ..1097	nap					0.72	ATL8C2 1722:4 09..10 68	g45860 48	65	1148	3.8e- 115	(AC007 020) putati ve polyga lactur onase [Arabi dopsis	

166679	ATU028 619	ATL8C3 1418:1 ..1997	nap				ATL8C3 1418:2 51..19 10	0.72	944163 01	65	2223	1.1e- 195	thalia nal (AF105 716) gag protei n [zea mays]
166680	ATU028 620	ATL8C3 2244:5 354..8 103	nap				ATL8C3 2244:6 040..7 379	0.71	936953 95	65	1402	4.2e- 89	(AF096 372) contai ns simila rity to revers e transc riptas e (Pfam: PF0007 8 rvt, E=4.3e -08) [Arabi dopsis thalia nal]
166681	ATU028 621	ATL8C3 4052:7 51..15 95	nap				ATL8C3 4052:7 51..14 76	0.71	941159 13	65	1052	1.1e- 94	(AF118 222) contai ns simila rity to Iron/A scorba te

166682	ATU028 622	ATL8C3 3259:1 ..954	nap						0.70	g31766 69	65	472	7.4e- 44	(AC004 393) End is cut off. [Arabi dopsis thalia na]
166683	ATU028 623	ATL8C5 248:19 32..1	nap						0.70	g43253 51	65	2327	3.8e- 244	(AF128 394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei n

166684	ATU028 624	ATL8C4 7981:1 ..1952	nap				ATL8C4 7981:1 36..17 40	0.70	g33778 16	65	2386	6.5e- 225	(GB:X5 7297) [Arabi dopsis thalia nal (AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia nal
166685	ATU028 625	ATL8S2 3221:1 ..209	nap				ATL8S2 3221:7 2..209	0.69	g45389 24	65	179	1.0e- 15	(AL049 483) V- ATPase G- subuni t like protei n [Arabi dopsis thalia nal

166686	ATU028 626	ATL8C1 5265:1 417..1	nap			ATL8C1 5265:1 417..3 53	0.68	g10830 08	65	237	1.4e- 24	carboxypeptidase H (EC 3.4.17.10) 56K chain - bovine [I]
166687	ATU028 627	ATL8C4 942:17 85..1	nap			ATL8C4 942:13 07..94	0.68	g24438 79	65	745	4.6e- 86	(AC002294) similar to jasmonate induced protein gp Y11483 1883006 [Arabi dopsis thaliana]
166688	ATU028 628	ATL8C4 4199:8 57..1	nap			ATL8C4 4199:6 71..38	0.68	g23927 63	65	334	2.7e- 29	(AC002534) hypothetical protein [Arabi dopsis thaliana]
166689	ATU028 629	ATL8C3 812:47	nap			ATL8C3 812:50	0.67	g28946 07	65	751	1.6e- 79	(AL021889)

166690	ATU028 630	9..108 1	nap				4..949	0.67	g28322 41	65	2332	1.9e- 177	NAM (no apical merist em) - like protei n [Arabi dopsis thalia na]
	ATL8C2 3311:4 247..1						ATL8C2 3311:3 912..1 69						(AF030 864) nonpho totrop ic hypoco tyl 1 [Arabi dopsis thalia na]
166691	ATU028 631	ATL8C3 0569:1 076..1	nap				ATL8C3 0569:1 076..1 10	0.67	g45126 89	65	354	1.8e- 40	(AC006 931) hypoth etical protei n [Arabi dopsis thalia na]
166692	ATU028 632	ATL8C4 3942:2 445..1 148	nap				ATL8C4 3942:2 362..1 148	0.66	g43887 32	65	647		(AC006 413) putati ve Athila retroee lement

166693	ATU028 633	ATL8C4 7887:7 36..10 76	nap					ATL8C4 7887:9 26..84 7	0.66		g42181 25	65	365	2.2e- 08	ORF 2 prote n [Arabi dopsis thalia na]
166694	ATU028 634	ATL8C4 5847:8 06..24 8	nap					ATL8C4 5847:7 97..55 8	0.65		g33675 89	65	721	4.4e- 37	(AL031 135) putati ve protei n [Arabi dopsis thalia na]
166695	ATU028 635	ATL8C4 1753:5 0..675	nap					ATL8C4 1753:1 07..64 9	0.65		g33866 02	65	932	1.5e- 94	(AC004 665) hypo thetical protei n [Arabi dopsis thalia na]
166696	ATU028 636	ATL8S1 7654:3 97..1	nap					ATL8S1 7654:3 97..10	0.65		g11691 61	65	107	2.1e- 08	CYTOCH ROME C4 []

166697	ATU028 637	ATL8C1 3195:1 ..819	nap				8	ATL8C1 3195:3 28..71 2	0.64	945389 34	65	881	7.4e- 80	(AL049 483) putati ve leucin e- rich- repeat protei n [Arabi dopsis thalia na]
166698	ATU028 638	ATL8C3 2275:1 067..1	nap					ATL8C3 2275:9 40..22 3	0.62	947739 18	65	1505	2.3e- 135	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
166699	ATU028 639	ATL8C3 1579:9 63..1	nap					ATL8C3 1579:8 45..22 1	0.62	946461 97	65	867	1.9e- 91	(AC007 230) T23K8. 5 [Arabi dopsis thalia na]
166700	ATU028 640	ATL8S2 1289:1 ..572	nap					ATL8S2 1289:6 5..511	0.61	917115 82, 913502 8	65, 32	284, 283	1.4e- 14, 1.2e- 24	SUCCIN YL-COA SYNTHE TASE BETA CHAIN

166701	ATU028 641	ATL8C2 1591:9 08..44 2	nap					ATL8C2 1591:7 54..46 3	0.61	g45443 84	65	175	3.4e- 12	(SCS- BETA) [Pseudomonas aeruginosa]; SUCCINYL-COA SYNTHETASE ALPHA CHAIN (SCS- ALPHA) [Escherichia coli]
166702	ATU028 642	ATL8C4 084:11 94..21 90	nap					ATL8C4 084:11 94..18 54	0.61	g32506 84	65	1116	1.5e- 115	(AL024 486) chitinase - like protein [Arabis dopsis thaliana]
166703	ATU028 643	ATL8C4 8451:5	nap					ATL8C4 8451:5	0.59	g44159 22	65	865	9.9e- 91	(AC006 282)

166705	ATU028 645	ATL8S1 4011:5 03..1	nap					ATL8S1 4011:5 03..69	0.58	g24995 48	65	151	3.5e- 13	PROBAB LE LOW MOLECU LAR WEIGHT PROTEI N- TYROSI NE- PHOSPH ATASE YCCY [Esche richia coli.]	NSFERA SE) (CDP- DAG SYNTHA SE) [Pseud omonas aerugi nosa]
166706	ATU028 646	ATL8C1 9845:1 ..783	nap					ATL8C1 9845:6 5..714	0.57	g17031 15	65	939	1.1e- 89	ACTIN 3 [Arabi dopsis thalia na]	
166707	ATU028 647	ATL8C4 260:1. .718	nap					ATL8C4 260:12 8..718	0.55	g18711 84	65	308	4.9e- 33	(U9043 9) unknow n protei n [Arabi dopsis thalia	

166708	ATU028 648	ATL8C2 8253:6 09..23	nap				ATL8C2 8253:2 47..58	0.54	g42630 54	65	355	5.9e- 38	na] (AC005 142) hypothe- tical protein [Arabi- dopsis thalia na]
166709	ATU028 649	ATL8C3 8135:2 568..1	nap				ATL8C3 8135:2 068..2 90	0.53	g10978 77	65	531	1.9e- 44	aminol- evulin- ate dehydr- atase [Lycop- ersico- n escule- ntum]
166710	ATU028 650	ATL8C4 8393:1 168..5 42	nap				ATL8C4 8393:1 168..5 42	0.52	g48369 34	65	410	9.3e- 47	(AC006 085) Hypothe- tical protein [Arabi- dopsis thalia na]
166711	ATU028 651	ATL8C3 652:26 88..1	nap				ATL8C3 652:24 57..36 8	0.52	g45859 36	65	3077	7.5e- 296	(AC007 211) putati- ve helica- se [Arabi- dopsis thalia na]

166712	ATU028 652	ATL8C5 59:684 ..1953	nap				ATL8C5 59:684 ..1783	0.50	g44328 20	65	1364	1.3e- 101	na] (AC006 593) putati ve glutam yl tRNA reduct ase HEMA2 [Arabi dopsis thalia na]
166713	ATU028 653	ATL8C3 8809:1 535..2 909	nap				ATL8C3 8809:2 350..2 909	0.49	g40068 94	65	336	1.7e- 32	(Z9970 8) homeod omain protei n [Arabi dopsis thalia na]
166714	ATU028 654	ATL8S4 644:1. .157	nap				ATL8S4 644:54 ..157	0.49	g25000 21	65	231	5.5e- 19	PHOSPH ORIBOS YLAMIN OIMIDA ZOLECA RBOXAM IDE FORMYL TRANSF ERASE (AICAR TRANSF ORMYLA SE) / IMP

166715	ATU028 655	ATL8C2 6248:1 ..2352	nap						ATL8C2 6248:1 39..19 10	0.49	g49268 28	65	272	6.6e- 17	CYCLOH YDROLA SE (INOSI NICASE) (IMP SYNTH TASE) (ATIC) [Chrom atium vinosu m]
166716	ATU028 656	ATL8C1 664:1. .2075	nap						ATL8C1 664:77 0..192 7	0.48	g44163 02	65	3434	8.5e- 302	(AC004 135) T17H7. 13 [Arabi dopsis thalia nal] (AF105 716) copia- type pol polypr otein [Zea mays]
166717	ATU028 657	ATL8C8 368:41 04..25 73	nap						ATL8C8 368:35 80..32 53	0.46	g68842 3	65	100	0.0016	(D2645 3) tumor- relate d protei n [Nicot iana glauca

166718	ATU028 658	ATL8C4 7082:3 827..1	nap							ATL8C4 7082:3 827..2 18	0.45	g49143 18, g40068 33	65, 64	1903, 1094	4.5e- 192, 1.0e- 106	(AC005 489) F14N23 .4 [Arabi dopsis thalia na]; (AC005 970) putati ve revers e transc riptas e [Arabi dopsis thalia na]	X Nicoti ana langsd orffii]
166719	ATU028 659	ATL8C3 6283:3 215..1	nap							ATL8C3 6283:3 102..4 5	0.42	g33193 60	65	2071	3.8e- 224	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like	

166720	ATU028 660	ATL8S5 523:37 1..60	nap					ATL8S5 523:30 8..257	0.42	g12885 5	65	275	2.2e- 23	gene (GB:AB 007467) [Arabi dopsis thalia na]
														NADH- PLASTO QUINON E OXIDOR EDUCTA SE SUBUNI T J (ORF 159) [Zea mays]
166721	ATU028 661	ATL8S1 2441:6 88..1	nap					ATL8S1 2441:6 04..16 2	0.41	g35401 90	65	579	3.7e- 38	(AC004 122) Hypoth etical protei n [Arabi dopsis thalia na]
														(AC004 122) Hypoth etical protei n [Arabi dopsis thalia na]
166722	ATU028 662	ATL8C4 9191:1 472..2 406	nap					ATL8C4 9191:1 487..2 351	0.41	g42042 95	65	176	9.0e- 18	(AC003 027) lcl pr t_seq No defini tion line found
														(AC003 027) lcl pr t_seq No defini tion line found

166723	ATU028 663	ATL8C2 3224:5 68..18 72	nap					ATL8C2 3224:5 71..17 02	0.40	g32362 53	65	796	1.1e- 86	[Arabi dopsi thalia na] (AC004 684) recept or- like protei n kinase [Arabi dopsi thalia na]
166724	ATU028 664	ATL8C2 3434:1 ..1934	nap							g47739 08	65	1694	1.0e- 161	(AF147 259) No defini tion line found [Arabi dopsi thalia na]
166725	ATU028 665	ATL8C5 018:75 2..1	nap							g33425 52	65	324	5.7e- 38	(AF076 979) putati ve strict osidin e syntha se [Arabi dopsi thalia na]

166726	ATU028 666	ATL8C3 9875:1 667..1	nap							g44327 97	65	1131	3.1e- 120	(AC006 437) putati ve pol polypr oteins [Arabi dopsis thalia na]
166727	ATU028 667	ATL8C1 0123:1 061..1 797	nap							g32928 17	65	534		(AL031 018) hypoth etical protei n [Arabi dopsis thalia na]
166728	ATU028 668	ATL8C3 2714:1 ..2064	nap							g36458 99	65	3032	7.7e- 291	(U6840 8) 5' end not determ ined experi mental ly [Zea mays]
166729	ATU028 669	ATL8C2 6593:1 ..1808	nap							g54897 6	65	82	0.96	SUPPRE SSOR PROTEI N SRP40 [Sacch aromyc es cerevi]

166737	ATU028 677	ATL8C2 0812:4 029..5 274	nap									g47739 20	65	922	3.5e- 96	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis thalia na]
166738	ATU028 678	ATL8C4 21:650 ..1984	nap									g42637 66	65	1544	1.4e- 142	(AC006 218) hypoth etical protei n [Arabi dopsis thalia na]
166739	ATU028 679	ATL8C2 762:1. .2798	nap									g47739 19, g45672 94	65, 48	1409, 1377	4.7e- 98, 1.7e- 119	(AF147 259) No defini tion line found [Arabi dopsis thalia na]; (AC006

166740	ATU028 680	ATL8S1 5323:1 ..616	nap							g80943 2	65	706	1.6e- 57	918) putati ve Athila retro ement ORF1 protei n [Arabi dopsis thalia na]
166741	ATU028 681	ATL8C4 8557:1 ..1032	nap							g72726 4	65	520	0.9996	(U1879 1) hydrox ypoli ne- rich glycop rotein precu sor [Phase olus vulgar is]
166742	ATU028 682	ATL8C1 4461:1 067..6	nap							g22535 79	65	106	4.8e- 09	(U7872 1) hypo

166743	ATU028 683	71	ATL8S2 1310:5 58..79	nap									g17300 31	65	238	1.5e- 19	etical protei n [Arabi dopsis thalia nal]
166744	ATU028 684		ATL8S2 9669:3 55..1	nap									g39148 51	65	97	3.0e- 09	CHLORO PLAST 30S RIBOSO MAL PROTEI N S4 [Hymen ocalli s littor alis]
166745	ATU028		ATL8C4	nap									g13058	65	1196	3.2e-	RETROV

	685	8531:2 529..1							2				99	IRUS- RELATE D POL POLYPR OTEIN FROM TRANSP OSON TNT 1- 94 [Nicot iana tabacu m]
166746	ATU028 686	ATL8C4 0788:7 82..40 0	nap						g28326 22	65	295	5.1e- 28	(AL021 711) cyclic phosph odiest erase - like protei n [Arabi dopsis thalia na]	
166747	ATU028 687	ATL8S1 1364:5 39..32	nap						g18061 61	65	277	9.6e- 23	(Z8439 5) hypoth etical protei n Rv0695 [Mycob acteri um tuberc ulosis]	

166748	ATU028 688	ATL8C1 1495:5 41..1	nap						g54792 7	65	697	6.0e- 62	MULTIP LE SUGAR- BINDIN G TRANSP ORT SYSTEM PERMEA SE PROTEI N MSG [Strep tococc us mutans]
166749	ATU028 689	ATL8S1 7787:5 65..1	nap				ATL8S1 7787:5 01..9	0.98	g33223 34	64	215	1.9e- 10	(AE001 192) sugar ABC transp orter, permea se protei n (y4oQ) [Trepo nema pallid um]
166750	ATU028 690	ATL8S6 102:1. .557	nap				ATL8S6 102:12 9..540	0.97	g27726 19	64	342		(U9335 5) hypoth etical 32.1 kDa protei n

166751	ATU028 691	ATL8C4 3063:1 02..20 73	nap					ATL8C4 3063:1 02..18 61	0.97	g45859 98	64	2678	5.0e- 262	(AC005 287) Hypoth etical protei n [Arabi dopsis thalia na]
166752	ATU028 692	ATL8C3 6121:1 ..725	nap					ATL8C3 6121:2 27..72 5	0.94	g45080 76	64	189	5.8e- 08	(AC005 882) 55659 [Arabi dopsis thalia na]
166753	ATU028 693	ATL8S6 54:279 ..1	nap					ATL8S6 54:279 ..84	0.94	g35823 39	64	313	9.6e- 30	(AC005 496) unknown protei n [Arabi dopsis thalia na]
166754	ATU028 694	ATL8C2 168:69 4..129	nap					ATL8C2 168:56 3..129	0.94	g46782 10	64	371	2.2e- 25	(AC007 134) hypoth etical protei n [Arabi dopsis thalia na]

166755	ATU028 695	ATL8S2 1584:1 ..568	nap				ATL8S2 1584:1 44..56 8	0.92		g26746 5	64	167	1.5e- 12	na] HYPOTH ETICAL 19.0 KD PROTEI N IN COBS 5'REGI ON (ORF2) [Pseud omonas denitr ifican s]
166756	ATU028 696	ATL8C4 9261:1 ..4127	nap				ATL8C4 9261:1 78..41 27	0.92		g47755 78	64	1646	9.7e- 153	(AJ238 786) MUS2 protei n [Zea mays]
166757	ATU028 697	ATL8C2 0131:1 ..1029	nap				ATL8C2 0131:2 06..10 02	0.91		g30471 26	64	1102		(AF058 919) No defini tion line found [Arabi dopsis thalia na]
166758	ATU028 698	ATL8C3 8824:7 53..19 47	nap				ATL8C3 8824:7 53..19 04	0.91		g44553 56	64	549	4.6e- 55	(AL035 524) putati ve protei n

166759	ATU028 699	ATL8C3 5016:1 445..1	nap					ATL8C3 5016:1 445..1 30	0.90	g44903 16	64	407	2.9e- 35	[Arabi dopsis thalia na] (AL035 678) nuceall in- like protei n [Arabi dopsis thalia na]
166760	ATU028 700	ATL8C3 125:1. .1042	nap					ATL8C3 125:31 6..793	0.90	g35823 16	64	181	4.4e- 14	(AC005 496) DNAJ- like protei n [Arabi dopsis thalia na]
166761	ATU028 701	ATL8C1 5591:3 757..1	nap					ATL8C1 5591:3 757..6 56	0.89	g44328 41	64	1538	1.9e- 113	(AC006 283) hypothe tical protei n [Arabi dopsis thalia na]
166762	ATU028 702	ATL8C9 803:1. .1415	nap					ATL8C9 803:38 3..111 4	0.89	g45672 94	64	1397	9.0e- 142	(AC006 918) putati ve Athila

166763	ATU028 703	ATL8C6 404:10 66..1	nap							ATL8C6 404:10 22..20 3	0.88	g39534 74	64	295	2.9e- 30	retroelement ORF1 protein [Arabis dopsis thaliana]
166764	ATU028 704	ATL8C4 1049:1 812..4 99	nap							ATL8C4 1049:1 661..5 62	0.87	g41159 42	64	946	6.9e- 91	(AF118 223) contains similarity to eukaryotic protein kinase domains (Pfam: PF00069, score=238.4, E=1e-67, N=1) and EF

166765	ATU028 705	ATL8C7 223:62 9..193 2	nap							0.86	g41159 21	64	1157	9.2e- 111	hand domains (Pfam: PF00036, score= 109.0, E=8.9e- 29, N=5) [Arabi dopsis thalia na]
166766	ATU028 706	ATL8C4 292:17 25..1	nap							0.84	g37639 20	64	612	6.9e- 65	(AF118 222) F3H7.4 gene produc t [Arabi dopsis thalia na]
166767	ATU028 707	ATL8C1 7019:2 347..6 830	nap							0.83	g42638 31	64	3768	0.0	(AC004 450) hypoth etical protein [Arabi dopsis thalia na]

166768	ATU028 708	ATL8S2 2731:1 ..557	nap					ATL8S2 2731:4 6..517	0.83	g17997 02	64	576	7.4e- 56	e transc riptas e [Arabi dopsis thalia na]
166769	ATU028 709	ATL8C1 2165:4 323..1 821	nap					ATL8C1 2165:4 228..3 461	0.82	g44328 02	64	2472	8.6e- 219	(D9086 3) AMIDOP HOSPHO RIBOSY LTRANS FERASE (EC 2.4.2. 14) (GLUTA MINE PHOSPH ORIBOS YLPYRO PHOSPH ATE AMIDOT RANSFE RASE) (ATASE) [Esche richia coli] (AC006 437) putati ve pol ypr otein, 5'

166770	ATU028 710	ATL8C1 3615:1 905..1	nap					ATL8C1 3615:1 841..2 40	0.82		g48368 72	64	1467	2.2e- 137	partia l [Arabi dopsis thalia na] (AC007 260) lcl pr t_seq No defini tion line found [Arabi dopsis thalia na]
166771	ATU028 711	ATL8C9 94:1.. 2181	nap					ATL8C9 94:116 ..1215	0.81		g12356 80	64	1006	2.1e- 101	(U4869 8) recept or serine /threo nine kinase PR5K [Arabi dopsis thalia na]
166772	ATU028 712	ATL8C1 9427:5 088..3 654	nap					ATL8C1 9427:4 769..3 711	0.81		g24438 75	64	1102	4.6e- 99	(AC002 294) amino acid permea se [Arabi dopsis

166773	ATU028 713	ATL8C1 2589:8 133..4 131	nap						0.80		g42635 44	64	3144	0.0	thalia na] (AC006 250) putati ve Athila retro ement ORF1 protei n [Arabi dopsis thalia na]
166774	ATU028 714	ATL8C2 7419:1 48..42 2	nap						0.80		g21480 45	64	71		self- incomp atibil ity protei n S3 precur sor - Papave r rheas [Papav er rheas]
166775	ATU028 715	ATL8C4 9941:1 ..1717	nap						0.80		g42635 43	64	1986	5.9e- 200	(AC006 250) putati ve Athila retro ement ORF1 protei

166776	ATU028 716	ATL8C5 461:36 63...43 6	nap					ATL8C5 461:34 89...43 6	0.80		g19316 49	64	1787	2.5e- 121	n [Arabi dopsis thalia na] (U9597 3) DNA helica se isolog [Arabi dopsis thalia na]
166777	ATU028 717	ATL8C1 3563:1 825...3 961	nap					ATL8C1 3563:2 425...3 635	0.80		g31526 11	64	2348	6.0e- 220	(AC004 482) hypoth etical protei n [Arabi dopsis thalia na]
166778	ATU028 718	ATL8C1 4398:2 241...4 136	nap					ATL8C1 4398:2 635...4 136	0.78		g48952 24	64	677	2.4e- 50	(AC007 660) putati ve revers e transc riptas e [Arabi dopsis thalia na]
166779	ATU028 719	ATL8C2 2477:1 940...1	nap					ATL8C2 2477:1 804...2	0.77		g38314 44	64	1470	1.9e- 161	(AC005 819) putati

166780	ATU028 720	ATL8C9 111:25 3..614	nap					90	ATL8C9 111:41 7..585	0.77	g46462 20	64	106			ve- protei n kinase [Arabi dopsis thalia na]
166781	ATU028 721	ATL8C4 1053:1 ..890	nap					ATL8C4 1053:4 ..890	0.76	g22448 35	64	897	7.1e- 93			(Z9733 7) protei n kinase homolo g [Arabi dopsis thalia na]
166782	ATU028 722	ATL8C8 730:72 7..1	nap					ATL8C8 730:64 7..42	0.76	g47411 89	64	839	7.8e- 76			(AL049 746) putati ve protei n [Arabi dopsis thalia na]
166783	ATU028	ATL8C1	nap					ATL8C1	0.75	g22447	64	216	3.2e-			(Z9733)

723	326:61 41..34 60						326:47 81..34 60	75			16	5) salt- induci ble protei n homolo g [Arabi dopsis thalia na]
166784	ATU028 724	ATL8S4 093:42 4..716	nap				ATL8S4 093:42 4..531	0.75	64	157	2.1e- 13	(AL049 746) putati ve protei n [Arabi dopsis thalia na]
166785	ATU028 725	ATL8C1 6868:2 860..1 765	nap				ATL8C1 6868:2 754..1 765	0.74	64	670	1.1e- 66	(AC006 300) hypoth etical protei n [Arabi dopsis thalia na]
166786	ATU028 726	ATL8C2 6077:9 84..27 5	nap				ATL8C2 6077:7 89..27 5	0.73	64	583	7.3e- 45	(AF033 536) putati ve zinc transp orter [Arabi

166787	ATU028 727	ATL8C3 4718:1 ..1490	nap					ATL8C3 4718:9 1..146 9	0.73	g28646 09	64	2232	9.5e- 235	dopsis thalia na] (AL021 811) putati ve protei n [Arabi dopsis thalia na]
166788	ATU028 728	ATL8C1 1752:1 21..32 54	nap					ATL8C1 1752:3 35..31 16	0.73	g47411 92	64	2066	2.8e- 157	(AL049 746) ABC transp orter- like protei n [Arabi dopsis thalia na]
166789	ATU028 729	ATL8C9 646:12 04..1	nap					ATL8C9 646:12 04..68	0.73	g39804 10	64	1900	2.3e- 164	(AC004 561) putati ve recept or- like protei n kinase [Arabi dopsis thalia na]
166790	ATU028	ATL8S9	nap					ATL8S9	0.72	g45443	64	401	2.4e-	(AC006

166791	730	20:123 ..586						20:290 ..393	80					39	920) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
	ATU028 731	ATL8S2 0348:5 55..77	nap					ATL8S2 0348:5 10..27 4	0.72	g25061 56	64	203	2.7e- 18	HYPOTH ETICAL OXIDOR EDUCTA SE IN PBPG- CDD INTERG ENIC REGION [Esche richia coli]	
166792	ATU028 732	ATL8C4 9790:1 ..2524	nap					ATL8C4 9790:9 66..24 18	0.72	g47340 13	64	1413	2.9e- 144	(AC007 112) putati ve TNP1 of the Taml transp oson [Arabi dopsis thalia nal]	
166793	ATU028 733	ATL8C2 3465:3	nap					ATL8C2 3465:3	0.70	g48503 90	64	1302	1.5e- 117	(AC007 357)	

166794	ATU028 734	ATL8C4 6178:1 ..501	nap					255..4 225		255..4 147							Strong similarity to gb D78 605 cytochrome P450 monooxygenase from Arabidopsis thaliana and is a member of the PF1000 67 Cytochrome P450 family .
166795	ATU028 735	ATL8C4 4552:1 ..2927	nap					ATL8C4 6178:1 29..37 4	0.70	g33954 41	64	449	2.0e- 36	(AC004 683) unknown protein [Arabidopsis thaliana na]	1.2e- 124	(AC006 067) hypothetical	

166796	ATU028 736	ATL8C3 0573:1 271..1	nap						ATL8C3 0573:1 008..1 7	0.69		g46783 08	64	830	6.3e- 82	protein [Arabi dopsis thalia na]
166797	ATU028 737	ATL8C5 540:24 4..307 4	nap						ATL8C5 540:69 2..306 3	0.68		g46462 08	64	2528	1.5e- 248	(AC007 230) Contai ns simila rity to F13P17 .8 []
166798	ATU028 738	ATL8C1 3787:1 255..1 48	nap						ATL8C1 3787:1 015..1 48	0.68		g48503 96	64	712	7.3e- 77	(AC007 357) F3F19. 15 [Arabi dopsis thalia na]
166799	ATU028 739	ATL8C1 7580:1 5..560	nap						ATL8C1 7580:1 5..536	0.68		g32362 46	64	455	3.8e- 45	(AC004 684) putati ve expans in protei

166800	ATU028 740	ATL8C4 7575:1 ..748	nap						ATL8C4 7575:1 06..74 8	0.67	g28946 07	64	111	1.9e- 07	n [Arabi dopsis thalia na] (AL021 889) NAM (no apical merist em) - like protei n [Arabi dopsis thalia na]
166801	ATU028 741	ATL8C1 5085:1 ..1381	nap						ATL8C1 5085:4 37..13 74	0.66	g21905 59	64	1307	3.7e- 133	(AC001 229) F5I14. 16 [Arabi dopsis thalia na]
166802	ATU028 742	ATL8C2 825:13 66..1	nap						ATL8C2 825:13 14..64 8	0.65	g22810 83	64	949	2.8e- 96	(AC002 333) polyga lactur onase isolog [Arabi dopsis thalia na]
166803	ATU028 743	ATL8C1 4665:7 28..1	nap						ATL8C1 4665:6 75..13	0.65	g49143 79	64	221	9.7e- 21	(AC007 584) hypoth

166809	ATU028 749	ATL8C1 5704:1 153..1	nap				ATL8C1 5704:1 071..3 06	0.62		g36458 98	64	1598	9.7e- 141	thalia nal (U6840 8) in- frame stop codon; possib ly a post- transp ositio n mutati on [Zea mays]
166810	ATU028 750	ATL8S1 4699:2 9..498	nap				ATL8S1 4699:2 9..459	0.62		g32041 08	64	164	3.8e- 14	(AJ006 764) putati ve deoxyc ytidyl ate deamin ase [Cicer arieti num]
166811	ATU028 751	ATL8C1 6643:2 005..1 300	nap				ATL8C1 6643:1 769..1 300	0.61		g44328 40	64	180	0.010	(AC006 283) unknow n protei n [Arabi dopsis thalia nal]
166812	ATU028	ATL8C3	nap				ATL8C3	0.60		g44067	64	3224		(AC006

166813	752	3911:1 41..34 51						3911:2 32..33 98	0.59		98						304) putati ve helica se [Arabi dopsis thalia na]
	ATU028 753	ATL8C5 0174:1 0252.. 6411	nap					ATL8C5 0174:1 0105.. 6411	0.59		98						(AC006 446) hypoth etical protei n [Arabi dopsis thalia na]; (AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
166814	754	ATL8S2 8617:5 13..1	nap					ATL8S2 8617:4 18..42	0.58		98						(U9537 5) oxidor educta se [Halof erax volcan

166815	ATU028 755	ATL8C4 8117:6 81..1	nap				ATL8C4 8117:4 77..22 0	0.58	g22621 62	64	273	9.1e- 31	ii] (AC002 329) hypothesis et al protein n similar to A. thaliana protein n F19K23 .19 [Arabidopsis thaliana]
166816	ATU028 756	ATL8C4 3548:7 465..1	nap				ATL8C4 3548:7 465..1 13	0.57	g47739 08, g42630 63, g45570 68	64, 63, 32	664, 1114, 931		(AF147 259) No definition line found [Arabidopsis thaliana] na]; (AC005 142) hypothesis et al protein n [Arabidopsis thaliana]

166817	ATU028 757	ATL8C4 7964:1 298..2 096	nap						ATL8C4 7964:1 401..1 951	0.57	938105 98	64	835	7.2e- 87	nal; (AC007 045) putati ve pol polypr oteins [Arabi dopsis thalia na]
166818	ATU028 758	ATL8S7 998:58 5..1	nap						ATL8S7 998:52 3..59	0.57	911767 07	64	225	1.1e- 19	HYPOTH ETICAL 33.0 KD PROTEI N IN PROB- PROA INTERG ENIC REGION [Coryn ebacte rium glutam icum]

166819	ATU028 759	ATL8S9 079:62 0..35	nap				ATL8S9 079:43 7..334	0.57	g30470 91	64	350	2.0e- 26	(AF058 826) No defini tion line found [Arabi dopsis thalia na]
166820	ATU028 760	ATL8C4 4303:2 864..1 51	nap				ATL8C4 4303:2 582..1 57	0.56	g33193 45	64	1345	2.5e- 133	(AF077 407) contai ns simila rity to maize transp oson MuDR (GB:M7 6978) [Arabi dopsis thalia na]
166821	ATU028 761	ATL8C2 8273:5 38..11 0	nap				ATL8C2 8273:4 14..13 9	0.56	g44067 82	64	689	7.9e- 59	(AC006 532) hypoth etical protei n [Arabi dopsis thalia na]
166822	ATU028 762	ATL8C4 9387:8	nap				ATL8C4 9387:8	0.56	g48352 42	64	1297	2.2e- 112	(AL049 862)

166823	ATU028 763	91..1	nap							91..12 6	0.54	g38106 01, g38057 69	64, 62	136, 1207	2.7e- 07, 7.0e- 122	putative protein [Arabidopsis thaliana]
		ATL8C2 299:21 90..1								ATL8C2 299:18 03..81						(AC005 398) hypothetical protein [Arabidopsis thaliana]; (AC005 693) putative mudR- like transposon [Arabidopsis thaliana]
166824	ATU028 764	ATL8C4 2961:9 00..1	nap							ATL8C4 2961:5 76..58	0.53	g33778 33	64	820	6.1e- 44	(AF075 598) containing similarity to Nicotiana tabacum

166825	ATU028 765	ATL8C1 4160:1 ..1190	nap					ATL8C1 4160:2 8..116 7	0.52	g27022 70	64	1765	1.1e- 169	m probab le integr ase (GB:X8 0830) [Arabi dopsis thalia nal]
166826	ATU028 766	ATL8C1 2122:8 0..738	nap					ATL8C1 2122:2 15..57 7	0.52	g38106 01	64	113	0.0002 9	(AC003 033) unknow n protei n [Arabi dopsis thalia nal]
166827	ATU028 767	ATL8C4 3315:6 63..1	nap					ATL8C4 3315:6 63..56	0.52	g24994 00	64	556		(AC005 398) hypoeth etical protei n [Arabi dopsis thalia nal]
														ASPART ATE CARBAM OYLTRA NSFERA SE (ASPAR TATE TRANSC

166828	ATU028 768	ATL8C2 5142:1 378..3 61	nap						ATL8C2 5142:1 226..5 87	0.52	g32876 91	64	285	1.2e- 21	ARBAMY LASE) (ATCAS E) [Mycob acteri um tuberc ulosis]
166829	ATU028 769	ATL8C4 629:27 5..771	nap						ATL8C4 629:27 5..637	0.51	g29823 01	64	237	6.0e- 18	(AC003 979) Contai ns simila rity to RING zinc finger protei n gb X95 455 from Gallus gallus . [Arabi dopsis thalia na]

166830	ATU028 770	ATL8C4 335:44 4..383 3	nap				ATL8C4 335:44 4..383 3	0.51	g42637 66, g40637 60	64, 37	1251, 1929	1.4e- 92, 2.3e- 200	a] (AC006 218) hypoeth etical protein n [Arabi dopsis thalia na]; (AC005 561) putati ve POL3 protei n [Arabi dopsis thalia na]
166831	ATU028 771	ATL8S2 0680:2 6..572	nap				ATL8S2 0680:2 6..482	0.51	g39140 71	64	193	1.6e- 19	MONOFU NCTION AL BIOSYN THETIC PEPTID OGLYCA N TRANSG LYCOSY LASE (MONOF UNCTIO NAL TGASE) [Acine tobact er sp.

166832	ATU028 772	ATL8C1 009:13 24..14 9	nap				ATL8C1 009:10 37..14 9	0.51	g33778 30	64	903	1.2e- 92	ADP1] (AF075 598) contai ns simila rity to Aplysi a califo rnica interm ediate filame nt protei n A (GB:X6 0297) [Arabi dopsis thalia nal]
166833	ATU028 773	ATL8C3 2705:3 198..1	nap				ATL8C3 2705:3 106..2	0.49	g45811 64, g32427 11	64, 53	530, 1613	7.3e- 65, 8.7e- 177	(AC006 220) putati ve polypr otein [Arabi dopsis thalia nal]; (AC003 040) hypothe tical protei n

166834	ATU028 774	ATL8S1 2926:6 16..1	nap						ATL8S1 2926:6 16..28	0.49	g24989 91	64	94	3.4e- 09	[Arabi dopsis thalia na]
166835	ATU028 775	ATL8S1 4910:1 81..59 6	nap						ATL8S1 4910:1 81..51 9	0.49	g17231 73	64	219	2.1e- 19	[Arabi dopsis thalia na]
166836	ATU028 776	ATL8C1 8557:1 ..3320	nap						ATL8C1 8557:2 58..30 20	0.48	g34510 61	64	1584	2.9e- 164	[Arabi dopsis thalia na]

166837	ATU028 777	ATL8C3 9097:1 ..589	nap					ATL8C3 9097:2 79..58 9	0.48	g42062 06	64	119	6.4e- 11	dopsis thalia na] (AF071 527) putati ve M- type thiore doxin [Arabi dopsis thalia na]
166838	ATU028 778	ATL8C2 2312:9 20..27 68	nap					ATL8C2 2312:1 847..2 768	0.48	g47340 12, g38057 69	64, 56	112, 1175	0.0046 , 3.6e- 127	(AC007 112) hypoth etical protei n [Arabi dopsis thalia na]; (AC005 693) putati ve mudR- like transp oson [Arabi dopsis thalia na]
166839	ATU028 779	ATL8C4 6270:2 37..97 5	nap					ATL8C4 6270:2 37..62 5	0.47	g45394 44	64	914	1.1e- 89	(AL049 523) hypoth etical

166846	ATU028 786	ATL8C2 1933:1 ..1074	nap				ATL8C2 1933:4 23..53 7	0.40	g17904 83	64	142	2.4e- 10	na] (AE000 478) orf, hypoth etical protei n [Esche richia coli]
166847	ATU028 787	ATL8C3 4045:3 14..12 36	nap						g43357 14	64	1481	3.5e- 143	(AC006 248) putati ve glucos yltran sferas e [Arabi dopsis thalia na]
166848	ATU028 788	ATL8S3 0819:1 ..559	nap						g27393 87	64	170	1.0e- 15	(AC002 505) hypoth etical protei n [Arabi dopsis thalia na]
166849	ATU028 789	ATL8C2 1905:1 099..4 587	nap						g30470 68	64	801	5.0e- 87	(AF058 825) simila r to maize transp oson

166856	795	8775:7 25..10 50								53								08	n - rape [Brass ica napus] (AC006 068) putati ve Tiny protei n [Arabi dopsis thalia na]
	ATU028 796	ATL8C3 3502:3 30..70 2	nap							g42637 85	64	443	1.8e- 42						
166857	ATU028 797	ATL8C1 534:1. .940	nap							g30969 20	64	926	5.2e- 94						(AL023 094) putati ve ketoac yl-CoA syntha se [Arabi dopsis thalia na]
166858	ATU028 798	ATL8C1 0347:2 985..1 658	nap							g47340 05	64	1283							(AC007 178) hypoth etical protei n [Arabi dopsis thalia na]
166859	ATU028 799	ATL8S1 3892:1	nap							g11512 5	64	261	8.0e- 25						HIGH- AFFINI

166862	ATU028 802	ATL8C3 1865:1 ..433	nap							g11682 17	64	169	1.8e- 14	DNA-3- METHYL ADENIN E GLYCOS IDASE (3- METHYL ADENIN E-DNA GLYCOS YLASE) (TAG) [Haemo philus influe nzae Rd]
166863	ATU028 803	ATL8C1 2670:1 ..645	nap							g46789 26	64	401	5.5e- 35	(Al049 711) hypoth etical protei n [Arabi dopsis thalia na]
166864	ATU028 804	ATL8C4 703:11 04..77 0	nap							g45194 20	64	185	1.3e- 08	(AB024 328) riboso mal protei n S13 [Therm us thermo philus]
166865	ATU028	ATL8C6	nap							g42630	64	434	2.7e-	(AC005

166870	809	218:1. .787										67				43	409) No defini tion line found [Arabi dopsis thalia na]
	ATU028 810	ATL8C4 2445:1 ..1691	nap									g45811 64	64	1911	1.2e- 198	(AC006 220) putati ve polypr otein [Arabi dopsis thalia na]	
166871	ATU028 811	ATL8C2 3834:3 51..24 66	nap									g30634 61	64	2713	1.8e- 286	(AC003 981) F22013 .23 [Arabi dopsis thalia na]	
166872	ATU028 812	ATL8C3 9311:2 355..8 29	nap									g28282 84	64	1004	2.7e- 100	(AL021 687) hypoth etical protei n [Arabi dopsis thalia na]	
166873	ATU028 813	ATL8S2 0921:5	nap									g45404	64	213	2.3e- 18	(Z1215 4)	

166876	ATU028 816	ATL8C1 452:58 0..124 2	nap							g17660 48	64	596	4.7e- 52	[Arabi dopsis thalia na] (U8199 4) NAD+ depend ent isocit rate dehydr ogenas e subuni t 2 [Arabi dopsis thalia na]
166877	ATU028 817	ATL8C1 9507:6 18..16 13	nap							g26186 94	64	557	4.2e- 51	(AC002 510) putati ve zinc- finger protei n [Arabi dopsis thalia na]
166878	ATU028 818	ATL8C1 5644:1 ..837	nap							g31281 74	64	284	1.6e- 28	(AC004 521) hypoth etical protei n [Arabi dopsis thalia na]

166883	ATU028 823	ATL8S2 2035:4 84..1	nap					ATL8S2 2035:4 13..27	1.00	g22574 74	63	622	5.1e- 60	na] (AB003 475) aldehy de dehydr ogenas e [Deino coccus radiod urans]
166884	ATU028 824	ATL8C1 9108:2 37..1	nap							g45743 20	64	124	4.1e- 10	(AF117 224) wound- induce d protei n WI12 [Mesem bryant hemum crysta llinum]
166885	ATU028 825	ATL8C2 4876:2 56..1	nap							g47339 87	64	135	3.6e- 18	(AC007 209) hypoth etical protei n [Arabi dopsis thalia na]
166886	ATU028 826	ATL8S2 5299:1 ..324	nap							g48951 75	64	217	2.1e- 19	(AC007 662) putati ve Athila

166887	ATU028 827	ATL8C2 8589:2 397..1 100	nap										g32362 53	64	869	5.8e- 86	(AC004 684) recept or- like protei n kinase [Arabi dopsis thalia na]	retro transpo son ORF1 protei n [Arabi dopsis thalia na]
166888	ATU028 828	ATL8C3 2084:2 055..3 86	nap										g45393 94	64	1062	5.6e- 111	(AL035 526) putati ve protei n [Arabi dopsis thalia na]	(AL035 526) putati ve protei n [Arabi dopsis thalia na]
166889	ATU028 829	ATL8S3 276:93 ..491	nap										g31702 07	64	258	3.3e- 13	(AF039 940) GrpE [Agrob acteri um tumefa ciens]	(AF039 940) GrpE [Agrob acteri um tumefa ciens]

166890	ATU028 830	ATL8C2 5795:5 34..11 3	nap							g25058 76	64	461	5.8e- 40	(Y1277 6) MYB- relate d protei n [Arabi dopsis thalia na]
166891	ATU028 831	ATL8C4 4742:3 63..76 2	nap							g53902 9	64	74	8.7e- 05	cystei ne- rich extens in- like protei n 1 precu sor - common tobacc o [Nicot iana tabacu m]
166892	ATU028 832	ATL8S2 5561:1 ..612	nap						ATL8S2 5561:1 4..550	0.99	63	219	3.3e- 31	(AL021 411) hypoth etical protei n SC7H1. 14 [Strep tomyce s coelic

166893	ATU028 833	ATL8C4 4459:1 ..707	nap				ATL8C4 4459:5 7..707	0.99	g38591 16	63	437	2.8e- 43	olor] (AF031 609) unknown n [Oryza sativa]
166894	ATU028 834	ATL8C4 6737:1 ..2281	nap				ATL8C4 6737:8 9..840	0.96	g37383 37	63	2338	1.3e- 226	(AC005 170) putati ve revers e transc riptas e [Arabi dopsis thalia na]
166895	ATU028 835	ATL8C4 4610:1 252..2 452	nap				ATL8C4 4610:1 252..2 329	0.95	g11725 38	63	1511	1.4e- 126	PROBAB LE PECTIN ESTERA SE PRECUR SOR (PECTI N METHYL ESTERA SE) (PE) [Brass ica napus]
166896	ATU028 836	ATL8C1 1692:2 490..4	nap				ATL8C1 1692:2 424..4	0.95	g33373 61	63	964	2.4e- 92	(AC004 481) ankyri

		68							96									n-like protei n [Arabi dopsis thalia na]
166897	ATU028 837	ATL8S9 739:50 2..1	nap						ATL8S9 739:44 2..80	0.95		g15685 83	63	476	3.9e- 31	(Z8077 5) hypoth etical protei n Rv0044 c [Mycob acteri um tuberc ulosis]		
166898	ATU028 838	ATL8C4 8081:1 ..705	nap						ATL8C4 8081:6 1..705	0.94		g10766 11	63	526	2.5e- 56	peroxi dase (EC 1.11.1 .7), anioni c, precur sor - wood tobacc o []		
166899	ATU028 839	ATL8C2 973:15 60..52 9	nap						ATL8C2 973:13 83..52 9	0.94		g22447 52	63	787	8.1e- 84	(Z9733 5) hypoth etical protei n [Arabi		

166900	ATU028 840	ATL8C2 4595:1 50..19 52	nap							0.93	g35818 70	63	63	7.3e- 06	dopsis thalia na] (AL031 541) hypoth etical protei n SCI35. 37 [Strep tomyce s coelic olor]
166901	ATU028 841	ATL8C1 2567:3 86..1	nap							0.92	g27393 79	63	299	1.6e- 24	(AC002 505) hypoth etical protei n [Arabi dopsis thalia na]
166902	ATU028 842	ATL8C2 6602:1 018..1	nap							0.91	g13562 6	63	447	3.1e- 40	TRANSC RIPTIO N INITIA TION FACTOR TFIID- 1 (TATA- BOX FACTOR 1) (TATA SEQUEN

166903	ATU028 843	ATL8C3 2601:1 ..462	nap							0.89	g46210 5	63	171	1.5e- 16	CE- BINDIN G PROTEI N 1) (TBP- 1) [Arabi dopsis thalia na]
166904	ATU028 844	ATL8C1 4271:1 ..721	nap							0.87	g31231 59	63	621	2.4e- 62	HYPOTH ETICAL 40.4 KD TRP- ASP REPEAT S CONTAI NING PROTEI N C14B1. 4 IN CHROMO SOME III []

166905	ATU028 845	ATL8C4 6208:1 024..1	nap				ATL8C4 6208:1 024..5 64	0.87	g45862 60	63	750	4.1e- 63	(AL049 640) putati ve protei n [Arabi dopsis thalia na]
166906	ATU028 846	ATL8C3 1580:1 192..5 11	nap				ATL8C3 1580:1 147..6 79	0.86	g46462 05	63	727	4.8e- 76	(AC007 230) T23K8. 8 [Arabi dopsis thalia na]
166907	ATU028 847	ATL8C3 5235:7 84..11 7	nap				ATL8C3 5235:5 90..11 7	0.86	g33554 82	63	162	3.5e- 15	(AC004 218) unknow n protei n [Arabi dopsis thalia na]
166908	ATU028 848	ATL8C4 0695:1 ..1501	nap				ATL8C4 0695:2 74..15 01	0.85	g43594 4	63	120	0.99	(U0429 6) DNA- bindin g factor of bZIP class [Oryza sativa]

166909	ATU028 849	ATL8C2 7591:1 ..2413	nap				ATL8C2 7591:1 79..23 14	0.84	g31231 61	63	132		HYPOTH ETICAL 77.0 KD TRP- ASP REPEAT S CONTAI NING PROTEI N F35G12 .4 IN CHROMO SOME III []
166910	ATU028 850	ATL8C1 5009:1 519..1	nap				ATL8C1 5009:1 450..8 3	0.84	g46782 79	63	1114	9.1e- 99	(AL049 660) carbox yl termin al protea se- like protei n [Arabi dopsis thalia nal]
166911	ATU028 851	ATL8C4 7662:1 ..386	nap				ATL8C4 7662:1 ..386	0.84	g42204 61	63	108	0.48	(AC006 216) ESTs gb T75 642 and gb AA6

166912	ATU028 852	ATL8C2 5627:1 124..1	nap							0.84	g21911 35	63	477	2.7e- 49	(AF007 269) A IG00 2N01.1 4 gene produc t [Arabi dopsis thalia na]	50997 come from this gene. [Arabi dopsis thalia na]
166913	ATU028 853	ATL8C8 012:1. .994	nap							0.83	g48836 01	63	1159	1.5e- 123	(AC006 922) hypoth etical protei n [Arabi dopsis thalia na]	
166914	ATU028 854	ATL8S3 20:604 ..192	nap							0.83	g43097 35	63	275	3.9e- 26	(AC006 439) hypoth etical protei n [Arabi dopsis thalia na]	

166915	ATU028 855	ATL8C3 9127:1 263..1 17	nap			ATL8C3 9127:7 37..48 2	0.82	g45875 40	63	432	1.5e- 42	(AC006 577) Belong s to the PF1006 57 Lipase /Acylh ydrola se with GDSL- motif family [Arabi dopsis thalia na]
166916	ATU028 856	ATL8C4 8996:6 84..1	nap			ATL8C4 8996:6 18..70	0.82	g38688 57	63	213	2.8e- 23	(AB013 886) RAV1 [Arabi dopsis thalia na]
166917	ATU028 857	ATL8C4 7087:1 ..1554	nap			ATL8C4 7087:8 2..114 2	0.82	g37382 97	63	548	1.2e- 37	(AC005 309) unknow n protei n [Arabi dopsis thalia na]
166918	ATU028 858	ATL8C2 98:938 ..2396	nap			ATL8C2 98:963 ..2255	0.81	g26641 0	63	775	5.4e- 56	CDC2+/ CDC28- RELATE

166919	ATU028 859	ATL8C3 6332:1 ..1240	nap					ATL8C3 6332:2 50..10 41	0.81	g17698 98	63	678	8.7e- 66	D PROTEI N KINASE R2 [Oryza sativa J] (Y0801 0) lectin recept or kinase [Arabi dopsis thalia nal (Z8149 0) simila r to WD domain , G- beta repeat s (2 domain s); cDNA EST EMBL:T 00482 comes from this gene; cDNA EST
166920	ATU028 860	ATL8C2 882:31 0..296 1	nap					ATL8C2 882:31 0..259 2	0.81	g38752 46	63	527	6.5e- 46	

166925	ATU028 865	ATL8C1 2806:1 ..1101	nap							ATL8C1 2806:7 35..11 01	0.77	g18414 75	63	154	2.3e- 17	(Y1110 5) Myb26 [Pisum sativu m]	(38kD) [Homo sapien s]
166926	ATU028 866	ATL8C8 295:97 8..35	nap							ATL8C8 295:82 7..76	0.77	g24987 32	63	844	1.9e- 76	PROBAB LE NADP- DEPEND ENT OXIDOR EDUCTA SE P2 [Arabi dopsis thalia na]	
166927	ATU028 867	ATL8C2 2840:2 44..27 02	nap							ATL8C2 2840:1 106..2 476	0.76	g44163 01	63	1822	2.4e- 138	(AF105 716) gag protei n [Zea mays]	
166928	ATU028 868	ATL8C4 7529:2 085..1	nap							ATL8C4 7529:1 646..3 87	0.74	g44173 09	63	2032	2.2e- 214	(AC006 446) putati ve pol polypr oteins with a revers e transc riptas	

166929	ATU028 869	ATL8C2 4590:2 060..1	nap						ATL8C2 4590:1 966..1 91	0.74		g38108 44	63	410	8.0e- 18	e domain [Arabi dopsis thalia na] (AL032 684) putati ve nucleo lar protei n- NOL1- NOP2- sun family [Schiz osacch aromyc es pombe]
166930	ATU028 870	ATI8C4 3755:6 5..249 1	nap						ATL8C4 3755:7 1..182 7	0.73		g30045 49	63	190		(AC003 673) unknow n protei n [Arabi dopsis thalia na] (AC006 437) unknow n protei n [Arabi
166931	ATU028 871	ATL8C2 1876:1 029..1	nap						ATL8C2 1876:9 57..48 1	0.72		g44328 01	63	275	3.0e- 27	(AC006 437) unknow n protei n [Arabi

166932	ATU028 872	ATL8S5 170:56 5..1	nap					ATL8S5 170:48 4..10	0.70	g21172 18	63	193	2.2e- 21	dopsis thalia nal (Z9558 5) ephC [Mycob acteri um tuberc ulosis]
166933	ATU028 873	ATL8C2 4589:7 91..1	nap					ATL8C2 4589:7 91..76	0.70	g33675 28	63	686	3.6e- 61	(AC004 392) Strong simila rity to [Arabi dopsis thalia nal]
166934	ATU028 874	ATL8C2 3580:8 81..39 0	nap					ATL8C2 3580:8 81..39 0	0.69	g34027 04	63	233	2.3e- 23	(AC004 261) hypoth etical protei n [Arabi dopsis thalia nal]
166935	ATU028 875	ATL8C3 2353:1 594...3 219	nap					ATL8C3 2353:1 958..3 069	0.69	g42630 51, g36953 87	63, 32	156, 690	0.0001 0, 2.7e- 71	(AC005 142) hypoth etical protei n [Arabi dopsis thalia nal]

166938	ATU028 878	ATL8C9 142:52 3..212 3	nap			ATL8C9 142:52 3..201 3	0.68	g48039 57	63	1859		(AC006 202) putati ve hydrox ypoli ne- rich glycop rotein [Arabi dopsis thalia nal]
166939	ATU028 879	ATL8C3 9187:1 ..2784	nap			ATL8C3 9187:6 ..2778	0.66	g47340 13	63	1465	2.5e- 122	(AC007 112) putati ve TNP1 of the Tam1 transp oson [Arabi dopsis thalia nal]
166940	ATU028 880	ATL8C3 4880:3 815..1 66	nap			ATL8C3 4880:3 180..2 79	0.66	g43097 48	63	1212	2.3e- 136	(AC006 217) hypoth etical protei n [Arabi dopsis thalia nal]
166941	ATU028 881	ATL8C3 8040:4 67..21	nap			ATL8C3 8040:4 82..16	0.66	g23263 42	63	635	8.3e- 63	(Y1118 7) Terpen

166942	ATU028 882	77	ATL8C2 2424:1 945..4 345	nap						78	ATL8C2 2424:1 945..4 174	0.64	g12446 53	63	514	7.7e- 31	e cyclas e, TCl [Arabi dopsis thalia na] (U4100 0) gag gene produc t [Zea mays] (D8325 4) prolyl aminop eptida se [Chrys eobact erium mening osepti cum] (AC005 957) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]
166943	ATU028 883		ATL8S2 4223:5 70..1	nap							ATL8S2 4223:4 88..23 0	0.62	g19450 74	63	641	2.0e- 51	
166944	ATU028 884		ATL8C4 5815:1 ..1806	nap							ATL8C4 5815:9 8..180 0	0.62	g41153 63	63	1357	1.0e- 129	

166945	ATU028 885	ATL8C1 2639:3 48..59 5	nap				ATL8C1 2639:3 48..59 5	0.62	g32692 89	63	327	1.7e- 11	(AL030 978) putati ve protei n [Arabi dopsis thalia na]
166946	ATU028 886	ATL8S1 8323:4 63..1	nap				ATL8S1 8323:4 63..12	0.61	g16536 90	63	109	1.6e- 11	(D9091 5) hypoth etical protei n [Synec hocyst is sp.]
166947	ATU028 887	ATL8C4 2991:1 428..4 6	nap				ATL8C4 2991:1 124..1 040	0.61	g23426 86	63	111	3.6e- 07	(AC000 106) Simila r to Saccha romyce s hypoth etical protei n YDR051 C (gb Z4 9209). ESTs gb T44 436,gb 142252 come

166948	ATU028 888	ATL8C1 3091:3 788..4 826	nap						ATL8C1 3091:3 788..4 822	0.61	g13619 82	63	1260	1.5e- 135	from this gene. [Arabi dopsis thalia na]
166949	ATU028 889	ATL8C4 0749:1 ..639	nap						ATL8C4 0749:1 03..50 4	0.61	g13532 66	63	460	4.7e- 41	(U2759 0) Fe(II) transp ort protei n [Sacch aromyc es cerevi siae]
166950	ATU028 890	ATL8S3 823:1. .439	nap						ATL8S3 823:73 ..429	0.60	g29169 42	63	502	1.8e- 35	(AL021 999) hypothe tical protei

166951	ATU028 891	ATL8S1 7233:5 99..1	nap						0.60		ATL8S1 7233:5 50..18		0.60		g32016 19	63	514	3.1e- 51	n RV0981 [Mycob acteri um tuberc ulosis]
166952	ATU028 892	ATL8C4 9192:1 992..1	nap						0.58		ATL8C4 9192:1 775..1 3		0.58		g22136 08	63	1960	4.6e- 201	(AC004 669) dihydr oxypol ypreny lbenzo ate methyl transf erase [Arabi dopsis thalia na]
166953	ATU028 893	ATL8C1 0008:1 ..3159	nap						0.58		ATL8C1 0008:9 47..22 60		0.58		g47739 08, g36953 99	63, 46	1600, 907	4.0e- 106	(AF147 259) No defini tion line found [Arabi dopsis thalia

166955	ATU028 895	ATL8C9 341:1. .1855	nap				ATL8C9 341:56 ..1847	0.57	g22621 05	63	1069	3.2e- 107	(AC002 343) unknown protein [Arabi dopsis thalia na]
166956	ATU028 896	ATL8C3 1599:8 66..23 52	nap				ATL8C3 1599:8 66..22 39	0.57	g49143 81	63	1158	2.2e- 116	(AC007 584) unknown protein [Arabi dopsis thalia na]
166957	ATU028 897	ATL8S6 801:17 4..519	nap				ATL8S6 801:17 4..510	0.57	g20766 70	63	212		(Z9515 0) hypoth etical protein Rv3095 [Mycob acteri um tuberc ulosis]
166958	ATU028 898	ATL8S2 9614:5 29..1	nap				ATL8S2 9614:4 97..39	0.57	g36767 48	63	512	5.0e- 48	(AF086 832) 20S protea some beta- subuni

166959	ATU028 899	ATL8C3 3021:3 40..1	nap					ATL8C3 3021:2 85..53	0.56	g37765 62	63	299	1.5e- 22	t precu sor [Strep tomyce s coelic olor] (AC005 388) Simila r to gb X80 472 STS15 gene from Solanu m tubero sum. [Arabi dopsis thalia na]
166960	ATU028 900	ATL8C3 7176:3 006..1 14	nap					ATL8C3 7176:2 449..1 14	0.56	g30333 86	63	214		(AC004 238) RING3- like protei n [Arabi dopsis thalia na]
166961	ATU028 901	ATL8S9 318:24 5..446	nap					ATL8S9 318:25 4..436	0.56	g24955 80	63	144	3.3e- 12	12.2 KD PROTEI N IN CSPD-

166962	ATU028 902	ATL8S7 526:49 4..265	nap					ATL8S7 526:44 4..291	0.55	g31228 18	63	231	5.0e- 19	CLPA INTERG ENIC REGION [Esche richia coli] 30S RIBOSO MAL PROTEI N S6 [Neiss eria gonorr hoeae]
166963	ATU028 903	ATL8C6 453:12 17..23 3	nap					ATL8C6 453:11 43..45 7	0.55	g31767 17	63	975	5.1e- 102	(AC002 392) putati ve pectin estera se [Arabi dopsis thalia na]
166964	ATU028 904	ATL8C4 0117:1 ..383	nap					ATL8C4 0117:6 9..348	0.54	g22448 37	63	507	1.2e- 50	(Z9733 7) protea some chain protei n [Arabi dopsis thalia na]
166965	ATU028 905	ATL8C4 1202:4	nap					ATL8C4 1202:3	0.53	g45672 08	63	112	2.5e- 05	(AC007 168)

166966	ATU028 906	0..494	nap				42..49 0	0.52	g33193 60	63	2405	1.3e- 207	unknown protein [Arabidopsis thaliana]
		ATL8C4 353:1. .2881					ATL8C4 353:96 1..288 1						(AF077 408) contains similarity to Vicia faba retrotrans- poson-like gene (GB:AB 007467) [Arabidopsis thaliana]
166967	ATU028 907	ATL8S2 9747:1 ..531	nap				ATL8S2 9747:4 ..508	0.51	g40152 1	63	175	8.7e- 17	HYPOTHE- TICAL 29.9 KD PROTEIN IN CRTE 3'REGION (ORF3) [Erwin]

166968	ATU028 908	ATL8C1 0253:2 908..5 722	nap					ATL8C1 0253:2 908..5 637	0.48	g43253 63	63	436		ia herbic ola]
166969	ATU028 909	ATL8S7 302:10 3..421	nap					ATL8S7 302:30 6..109	0.47	g42637 71	63	156	1.3e- 13	(AF128 395) contai ns simila rity to transp osase [Arabi dopsis thalia na]
166970	ATU028 910	ATL8C1 2077:1 ..1097	nap					ATL8C1 2077:4 7..103 2	0.46	g36953 82	63	1774	7.7e- 178	(AC006 218) putati ve nonspe cific lipid- transf er protei n precur sor [Arabi dopsis thalia na]
														(AF096 370) contai ns simila rity to

166971	ATU028 911	ATL8C1 4510:1 255..5 22	nap					ATL8C1 4510:1 209..5 37	0.46	g45899 59	63	75	2.0e- 07	Arabidopsis thaliana retrotransposon Tall-1 (GB:L4 7193) [Arabidopsis thaliana na] (AC007 169) hypothetical protein [Arabidopsis thaliana na]
166972	ATU028 912	ATL8C1 2569:1 ..301	nap					ATL8C1 2569:4 5..202	0.44	g38057 59	63	252	1.6e- 21	(AC005 693) hypothetical protein [Arabidopsis thaliana na]
166973	ATU028 913	ATL8C3 0697:3 85..32 21	nap					ATL8C3 0697:7 23..32 21	0.44	g33193 60	63	2391	3.9e- 197	(AF077 408) contains similarity

166974	ATU028 914	ATL8C1 4117:9 02..1	nap						0.44	g13635 28	63	955	1.1e- 79	gaag protei n - maize [Zea mays]	to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
166975	ATU028 915	ATL8C8 225:1. .1899	nap						0.44	g26186 94, g45388 54	63, 35	543, 197	2.4e- 46, 1.5e- 14	(AC002 510) putati ve zinc- finger protei n [Arabi dopsis thalia na]; (AJ223 757) 54 kDa vacuol ar H(+)- ATPase	

166980	ATU028 920	ATL8C3 4205:3 115..4 14	nap										g33193 60	63	2176	7.5e- 141	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]	etical protei n [Arabi dopsis thalia na]
166981	ATU028 921	ATL8S2 7394:1 ..665	nap										g12316 7	63	377	1.4e- 36	HISTID INOL- PHOSPH ATE AMINOT RANSFE RASE (IMIDA ZOLE ACETOL - PHOSPH	

166985	ATU028 925	ATL8C3 1945:9 53..12 0	nap							g48952 24	63	733	5.1e- 62	(AC007 660) putati ve revers e transc riptas e [Arabi dopsis thalia na]
166986	ATU028 926	ATL8C3 1910:5 8..110 4	nap						ATL8C3 1910:5 8..474	1.00	62	502	1.7e- 49	(AC007 134) putati ve revers e transc riptas e [Arabi dopsis thalia na]
166987	ATU028 927	ATL8C3 6022:1 365..1 22	nap							g42042 80	63	495	7.5e- 56	(AC004 146) Hypoth etical protei n [Arabi dopsis thalia na]
166988	ATU028 928	ATL8S1 7865:1 ..345	nap							g11463 1	63	281	2.0e- 25	ATP SYNTHA SE B CHAIN

166989	ATU028 929	ATL8C4 5046:1 357..1 709	nap										g44689 82	63	375	1.2e- 35	(AL035 605) putati ve protei n [Arabi dopsis thalia na]
166990	ATU028 930	ATL8C2 7983:1 ..325	nap										g13880 88	63	219		(U3583 1) thiore doxin m [Pisum sativu m]
166991	ATU028 931	ATL8C3 7381:1 ..614	nap										g45393 85	63	729		(AL035 526) putati ve protei n [Arabi dopsis thalia na]
166992	ATU028 932	ATL8C1 0331:1 ..2285	nap										g45444 60, g42638 30	63, 39	621, 403		(AC006 592) putati ve revers e

166995	ATU028 935	ATL8C2 9507:3 574..1 231	nap										g37460 69	63	2426	9.1e- 239	dopsis thalia na]
166996	ATU028 936	ATL8C4 5951:4 01..31 87	nap										g33193 60	63	2316	1.3e- 206	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
166997	ATU028 937	ATL8C4 2348:1 074..1	nap										g42622 13	63	436	4.8e- 32	(AC006 161) hypoth

167002	941	177:1. .565								36						38	658) putati ve protei n [Arabi dopsis thalia nal]
	ATU028 942	ATL8C3 0189:4 68..1	nap							g40069 04	63	185				6.2e- 16	(Z9970 8) putati ve MADS- box protei n [Arabi dopsis thalia nal]
167003	ATU028 943	ATL8C1 6980:1 ..2083	nap							g26186 93	63	2370				1.4e- 233	(AC002 510) putati ve zinc- finger protei n [Arabi dopsis thalia nal]
167004	ATU028 944	ATL8C3 4699:8 46..37 7	nap							g48862 83	63	783				1.1e- 75	(AL050 300) putati ve protei n [Arabi

167010	ATU028 950	ATL8S2 2847:5 39..1	nap							g16847 31	63	309	9.9e- 25	(Z7391 4) ORF286 protein [Pseudomonas stutzeri]	41); nearly identical, may be the same protein [Arabidopsis thaliana na]
167011	ATU028 951	ATL8C4 555:22 5..1	nap							g37383 31	63	187	1.9e- 06	(AC005 170) unknown protein [Arabidopsis thaliana na]	
167012	ATU028 952	ATL8C4 5167:1 758..1	nap							g40564 32	63	851	1.5e- 86	(AC005 990) Similar r to [Arabidopsis thaliana na]	

167013	ATU028 953	ATL8C1 3593:2 412..2 089	nap							947340 12	63	166	2.8e- 12	(AC007 112) hypoth etical protei n [Arabi dopsis thalia na]
167014	ATU028 954	ATL8C7 235:27 08..20 34	nap							932528 16	63	453	7.8e- 48	(AC004 705) hypoth etical protei n [Arabi dopsis thalia na]
167015	ATU028 955	ATL8C2 4192:2 213..1 820	nap							940380 66	63	332	2.3e- 09	(AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
167016	ATU028 956	ATL8C4 1518:3 152..1 688	nap							929147 07	63	2194	3.5e- 223	(AC003 974) putati ve diseas e resist ance protei n (Cf-

[illegible]

167017	ATU028 957	ATL8S8 564:45 3..1	nap							g12352 7	63	131	0.37	HISTID INE- RICH PROTEI N PRECUR SOR (CLONE PFHRP- III) []	2.2) [Arabi dopsis thalia na]
167018	ATU028 958	ATL8C3 7034:1 551..4 87	nap							g37860 11	63	604	2.7e- 57	(AC005 499) putati ve elonga tion factor [Arabi dopsis thalia na]	
167019	ATU028 959	ATL8C3 5666:1 706..1	nap							g30470 68	63	152	1.8e- 17	(AF058 825) simila r to maize transp oson MuDR (GB:M7 6978) [Arabi dopsis thalia na]	

[illegible]

167024	ATU028 964	ATL8C1 4379:1 ..1740	nap					0.99	g43l43 68	62	166	6.4e- 06	(AC006 340) hypoth etical protei n [Arabi dopsis thalia na]
167025	ATU028 965	ATL8C2 2258:5 83..16 27	nap					0.99	g3l081 61	62	1006	3.1e- 95	(AF061 106) putati ve monosa cchari de transp orter 1 [Petun

167026	ATU028 966	ATL8C3 4635:1 703:..4 37	nap							ATL8C3 4635:1 459:..4 37	0.99		g40976 84	62	184	4.3e- 13	(U6649 3) ubiqui tin conjug ating enzyme [Metar hizium anisop liae]
167027	ATU028 967	ATL8C2 6538:1 42..1	nap							ATL8C2 6538:1 42..80	0.98		g46781 99	62	228	2.6e- 15	(AC007 134) hypoth etical protei n [Arabi dopsis thalia na]
167028	ATU028 968	ATL8C2 7984:2 21..1	nap							ATL8C2 7984:2 21..92	0.98		g40975 87	62	142		(U6492 6) NTGP5 [Nicot iana tabacu m]
167029	ATU028 969	ATL8S1 6463:1 ..444	nap							ATL8S1 6463:5 4..435	0.97		g45840 90	62	285	7.2e- 27	(AJ010 128) glycyl -tRNA synthe tase [Bacil lus cereus

167030	ATU028 970	ATL8C1 8599:3 941..1	nap				ATL8C1 8599:3 680..9	0.94		g45593 81, g38735 50	62, 34	138, 63	1.9e- 12, 0.9999	[AC006 526) hypoth etical protei n [Arabi dopsis thalia na]; (AL033 534) serine -rich protei n [Schiz osacch aromyc es pombel]
167031	ATU028 971	ATL8C9 623:96 6..1	nap				ATL8C9 623:86 8..9	0.92		g17698 97	62	331	2.0e- 43	(Y0801 0) lectin recept or kinase [Arabi dopsis thalia na]
167032	ATU028 972	ATL8S5 823:45 ..618	nap				ATL8S5 823:10 8..598	0.90		g39351 40	62	134	1.1e- 11	(AC005 106) T25N20 .4 [Arabi dopsis thalia na]

167033	ATU028 973	ATL8C3 2593:1 ..1098	nap				ATL8C3 2593:5 ..1098	0.90	g39351 73	62	1209	4.5e- 125	(AC004 557) F17L21 .16 [Arabi dopsis thalia na]
167034	ATU028 974	ATL8C2 2973:1 ..808	nap				ATL8C2 2973:1 60..23 7	0.90	g21911 63	62	1277	1.4e- 123	(AF007 270) contai ns simila rity to beta transd ucins [Arabi dopsis thalia na]
167035	ATU028 975	ATL8C4 002:87 2..1	nap				ATL8C4 002:78 0..649	0.89	g18711 77	62	701	9.3e- 65	(U9043 9) unknow n protei n [Arabi dopsis thalia na]
167036	ATU028 976	ATL8C2 4547:1 021..2 10	nap				ATL8C2 4547:9 74..21 0	0.89	g23672 08	62	216	4.2e- 18	(AE000 404) methyl ase for 50S riboso mal

167037	ATU028 977	ATL8S3 949:17 1..1	nap					ATL8S3 949:17 1..53	0.89	g13346 4	62	166	1.1e- 11	DNA- DIRECT ED RNA POLYME RASE OMEGA CHAIN (TRANS CRIPTA SE OMEGA CHAIN) (RNA POLYME RASE OMEGA SUBUNI T) [Esche richia coli]
167038	ATU028 978	ATL8C2 2882:1 484..1	nap					ATL8C2 2882:1 484..9	0.87	g22450 09	62	778	2.2e- 86	(Z9734 1) hypoth etical protei n [Arabi dopsis thalia na]
167039	ATU028 979	ATL8C3 9160:1	nap					ATL8C3 9160:1	0.87	g46783 10	62	596	3.6e- 65	(AL049 655)

167040	ATU028 980	..1206					13..12 06	0.85	g27919 00	62	319	8.1e- 20	putati ve protei n [Arabi dopsis thalia na]
		ATL8C3 1992:1 135..6 5	nap				ATL8C3 1992:1 065..6 5						(AJ000 057) PF7 [Arabi dopsis thalia na]
167041	ATU028 981	ATL8C3 7165:2 097..5 52	nap				ATL8C3 7165:1 990..1 156	0.85	g32830 26	62	339		(AF051 562) putati ve transp osase [Arabi dopsis thalia na]
167042	ATU028 982	ATL8S1 3137:4 6..489	nap				ATL8S1 3137:4 6..458	0.82	g21051 34	62	93	5.6e- 10	(U6498 4) unknow n [Bacte rioph age Mx8]
167043	ATU028 983	ATL8S2 8484:1 ..582	nap				ATL8S2 8484:1 10..58 2	0.82	g24952 07	62	218	3.7e- 16	HYPOTH ETICAL PROTEI N HI0118 [Haemo philus

167044	ATU028 984	ATL8C4 4710:1 ..1124	nap					ATL8C4 4710:2 83..96 6	0.82	g36458 98	62	1687	4.9e- 142	influe nzae Rd] (U6840 8) in- frame stop codon; possib ly a post- transp ositio n mutati on [Zea mays]
167045	ATU028 985	ATL8C1 3675:2 064..3 61	nap					ATL8C1 3675:1 847..3 74	0.81	g34027 49	62	663	2.9e- 72	(AL031 187) putati ve protei n [Arabi dopsis thalia na]
167046	ATU028 986	ATL8C1 367:38 24..56 80	nap					ATL8C1 367:38 24..53 49	0.81	g42638 30	62	1727	1.3e- 137	(AC006 067) hypoth etical protei n [Arabi dopsis thalia na]
167047	ATU028 987	ATL8C3 7761:4	nap					ATL8C3 7761:4	0.80	g23702 53	62	836	3.1e- 70	(Y1327 3)

167048	ATU028 988	ATL8C2 7737:1 05..17 59	nap					119..1 350					62	483			putative protein kinase [Lycopersicon esculentum] (AC005896) unknown protein [Arabidopsis thaliana]
167049	ATU028 989	ATL8C3 9657:1 198..2 206	nap					ATL8C3 9657:1 198..1 917		0.77		g42181 18	62	1329	2.3e- 128		(AL035353) putative protein [Arabidopsis thaliana]
167050	ATU028 990	ATL8S2 7196:1 ..658	nap					ATL8S2 7196:2 6..591		0.75		g95567 , g36614 83	62, 46	290, 88	3.5e- 27, 3.3e- 05		hypothetical protein B - Erwinia amylovora [Erwinia]

167051	ATU028 991	ATL8C3 257:96 3..1	nap					ATL8C3 257:90 9..214	0.75	g42061 22	62	648	5.8e- 63	(AF097 667) protei n phosph atase 2C homolo g [Mesem bryant hemum crysta llinum]	amyl ov oral; (AF081 284) Hp2 [Esche richia coli]
167052	ATU028 992	ATL8C4 7975:2 122..4 513	nap					ATL8C4 7975:2 122..4 486	0.75	g43099 72	62	2081	5.4e- 129	(AC002 983) hypoth etical protei n [Arabi dopsis thalia na]	
167053	ATU028 993	ATL8C2 9654:1 017..1 330	nap					ATL8C2 9654:1 017..1 323	0.74	g14183 29	62	276	1.3e- 24	(X9867 7) zinc finger protei n [Arabi	

167054	ATU028 994	ATL8C3 277:16 19..39 05	nap						ATL8C3 277:16 19..39 05	0.74	g42630 63	62	1044	4.9e- 122	dopsis thalia na] (AC005 142) hypoth etical protei n [Arabi dopsis thalia na]
167055	ATU028 995	ATL8C3 8329:1 ..1962	nap						ATL8C3 8329:6 05..19 11	0.73	g45799 13	62	1196	2.4e- 87	(AB023 423) sulfat e transp orter [Arabi dopsis thalia na]
167056	ATU028 996	ATL8S2 2524:5 99..1	nap						ATL8S2 2524:5 44..23	0.73	g41848 0	62	208	5.4e- 20	HYPOTH ETICAL 34.0 KD PROTEI N IN GLNA- RBN INTERG ENIC REGION [Esche richia coli]
167057	ATU028 997	ATL8C2 4429:5 60..1	nap						ATL8C2 4429:5 15..85	0.72	g33193 53	62	175	5.7e- 08	(AF077 407) contai

[illegible]

167058	ATU028 998	ATL8C2 1800:1 444..1	nap					0.71	g29824 38	62	606	2.3e- 51	(AL022 224) cadine ne syntha se like protei n [Arabi dopsis thalia nal]
167059	ATU028 999	ATL8S2 6084:7 ..399	nap					0.71	g22583 62	62	169	2.9e- 06	(AF007 261) NADH dehydr ogenas e, subuni t 6 [Recli nomona s americ anal]

167060	ATU029 000	ATL8C3 7126:8 43..1	nap				ATL8C3 7126:6 10..29 1	0.71	g45861 20	62	954	(AL049 638) putati ve protei n [Arabi dopsis thalia nal]
167061	ATU029 001	ATL8C1 7233:3 284..1	nap				ATL8C1 7233:2 175..1 932	0.70	g44327 94	62	2403	(AC006 437) putati ve Tnp2 Tam1 transp oson protei n [Arabi dopsis thalia nal]
167062	ATU029 002	ATL8S2 0755:1 ..415	nap				ATL8S2 0755:7 3..345	0.69	g12035 6	62	179	PROBAB LE TRANSC RIPTIO NAL REGULA TOR FLP [Lacto bacill us casei]
167063	ATU029 003	ATL8C3 230:10 761..1 5136	nap				ATL8C3 230:10 761..1 3376	0.69	g33778 16	62	1722	(AF076 275) contai ns

167064	ATU029 004	ATL8C2 9660:7 0..137 0	nap						ATL8C2 9660:8 2..133 0	0.69	g38596 08	62	751	9.9e- 80	similarity to Arabidopsis thaliana retrotransposon Athila (GB:X81801) [Arabidopsis thaliana]
167065	ATU029 005	ATL8C4 9758:1 702..3 65	nap						ATL8C4 9758:1 625..3 65	0.68	g31691 81	62	831	4.3e- 71	(AC004401) putative casein kinase II catalytic subunit [Arabidopsis thaliana]

167066	ATU029 006	ATL8C3 9958:2 577..1 710	nap					ATL8C3 9958:2 181..1 710	0.68	g27393 87	62	840	5.3e- 74	dopsis thalia na] (AC002 505) hypoth etical protei n [Arabi dopsis thalia na]
167067	ATU029 007	ATL8C4 7721:2 057..1 299	nap					ATL8C4 7721:1 928..1 866	0.68	g31842 87	62	142	3.0e- 20	(AC004 136) revers e- transc riptas e-like protei n [Arabi dopsis thalia na]
167068	ATU029 008	ATL8C4 6055:1 120..2 599	nap					ATL8C4 6055:1 120..2 480	0.67	g43253 51	62	2606	2.2e- 263	(AF128 394) simila r to Antirr hinum majus (garde n snapdr agon) TNP2 protei n

167069	ATU029 009	ATL8C3 2448:1 ..702	nap						ATL8C3 2448:6 8..659	0.67		g28327. 09	62	1038	1.1e- 94	(GB:X5 7297) [Arabi dopsis thalia na]
167070	ATU029 010	ATL8C2 9664:7 67..1	nap						ATL8C2 9664:6 53..93	0.66		g45443 98	62	840	9.3e- 77	(AC007 047) hypoth etical protei n [Arabi dopsis thalia na]
167071	ATU029 011	ATL8C1 5195:1 ..2149	nap						ATL8C1 5195:6 6..205 1	0.66		g47339 73	62	2416	1.4e- 216	(AC007 264) hypoth etical protei n [Arabi dopsis thalia na]

167072	ATU029 012	ATL8C4 4241:6 90..1	nap				ATL8C4 4241:6 23..56	0.63	g45393 13	62	312	1.6e- 35	(AL035 679) putati ve protei n [Arabi dopsis thalia nal]
167073	ATU029 013	ATL8C3 5498:1 122..1	nap				ATL8C3 5498:8 69..12 8	0.62	g11760 02	62	148	1.1e- 14	HYPOTH ETICAL 55.1 KD PROTEI N IN FAB1- PES4 INTERG ENIC REGION [Saach aromyc es cerevi siae]
167074	ATU029 014	ATL8C2 175:11 60..46 6	nap				ATL8C2 175:11 60..56 2	0.61	g46999 36	62	807	8.7e- 73	(AC007 166) hypoth etical protei n [Arabi dopsis thalia nal]
167075	ATU029 015	ATL8C4 8884:1 68..59 7	nap				ATL8C4 8884:2 75..59 7	0.60	g30804 39	62	28	0.18	(AL022 605) putati ve

167076	ATU029 016	ATL8C1 3842:1 059..1	nap					ATL8C1 3842:1 056..4 39	0.59	g26233 04	62	252	1.0e- 19	prote n [Arabi dopsis thalia na]
167077	ATU029 017	ATL8C3 5858:1 ..1045	nap					ATL8C3 5858:1 58..10 41	0.58	g45876 80	62	910	9.2e- 91	(AC007 197) putati ve cytoch rome p450 [Arabi dopsis thalia na]
167078	ATU029 018	ATL8C1 744:41 0..345 6	nap					ATL8C1 744:41 0..343 8	0.58	g40380 56	62	2263	1.9e- 213	(AC005 897) putati ve transp oson [Arabi dopsis thalia na]
167079	ATU029	ATL8C1	nap					ATL8C1	0.57	g48504	62	1457	6.9e-	(AC007)

167083	ATU029 023	ATL8C3 2575:8 91..6	nap					ATL8C3 2575:8 24..69	0.55	g21601 49	62	219	1.2e- 26	[Arabi dopsis thalia na] (AC000 375) No defini tion line found [Arabi dopsis thalia na]
167084	ATU029 024	ATL8C2 8690:7 31..1	nap					ATL8C2 8690:5 91..41 0	0.55	g48368 85	62	288	9.8e- 29	(AC007 260) Hypoth etical protei n [Arabi dopsis thalia na]
167085	ATU029 025	ATL8C3 3497:1 152..1	nap					ATL8C3 3497:1 072..2 00	0.55	g49143 21	62	1030	9.6e- 115	(AC005 489) F14N23 .7 [Arabi dopsis thalia na]
167086	ATU029 026	ATL8C8 271:20 49..63 2	nap					ATL8C8 271:19 06..63 2	0.54	g44540 12	62	1589	1.8e- 170	(AL035 396) Pollen - specif ic protei

167087	ATU029 027	ATL8C4 5810:1 ..1242	nap				ATL8C4 5810:1 43..10 96	0.54	g22448 63	62	1379	2.1e- 73	(Z9733 7) hypoth etical protei n [Arabi dopsis thalia na]
167088	ATU029 028	ATL8C2 3732:1 542..1 91	nap				ATL8C2 3732:1 458..1 91	0.53	g39478 54	62	109	5.8e- 06	(AL034 381) conser ved hypoth etical PFAM UPF003 1 contai ning protei n [Schiz osacch aromyc es pombel]
167089	ATU029 029	ATL8C4 2487:7 01..18 0	nap				ATL8C4 2487:3 94..18 0	0.52	g31933 29	62	420	1.9e- 41	(AF069 299) contai ns

167090	ATU029 030	ATL8C1 370:20 09..32 96	nap							ATL8C1 370:20 09..31 91	0.52	g38596 08	62	1946	8.7e- 181	similarity to EF-hand calcium- binding domain (Pfam: efhand .hmm, score; 16.10) [Arabi dopsis thalia na]
167091	ATU029 031	ATL8C4 3803:1 365..1	nap							ATL8C4 3803:1 274..2 36	0.52	g32818 63	62	1345		(AL031 004) putative protein [Arabi dopsis thalia na]
167092	ATU029	ATL8C6	nap							ATL8C6	0.51	g36500	62	1570	3.3e-	(AC005

167093	032	66:1.. 1650					66:173 ..900	0.50		35				2142	3.9e- 220	203	396) putati ve revers e transc riptas e [Arabi dopsis thalia na]
	ATU029 033	ATL8C7 274:13 34..1	nap				ATL8C7 274:12 66..58			g33373 54	62						(AC004 481) hypoeth etical protei n [Arabi dopsis thalia na]
167094	ATU029 034	ATL8C4 370:25 16..12 0	nap				ATL8C4 370:20 80..16 3	0.49		g45389 01	62			1792	1.8e- 189		(AL049 482) RNA- direct ed DNA polyme rase- like protei n [Arabi dopsis thalia na]
167095	ATU029 035	ATL8C2 4018:1 089..1	nap				ATL8C2 4018:1 089..2 77	0.49		g22621 19	62			1220	1.5e- 124		(AC002 343) yeast hypoeth

167096	ATU029 036	ATL8C2 5266:1 ..2023	nap					ATL8C2 5266:1 478..9 53	0.48	944327 94	62	2977	1.1e- 310	(AC006 437) putati ve Tnp2 Tam1 transp oson protei n [Arabi dopsis thalia nal]
167097	ATU029 037	ATL8C7 880:1. .734	nap					ATL8C7 880:11 5..465	0.47	948357 82	62	598	1.4e- 58	(AC007 296) Identi cal to gb AF0 16621 ATP- depend ent Clp protea se proteo lytic subuni t from

	039	1118:3 57..18 92								1118:3 57..15 44	28				89	496) hypoth etical protei n [Arabi dopsis thalia na]
167100	ATU029 040	ATL8S3 0473:1 7..723	nap						0.42	ATL8S3 0473:1 7..674	g10728 44	62	463		1.4e- 44	fixO protei n - Azorhi zobium caulin odans [Azorh izobiu m caulin odans]
167101	ATU029 041	ATL8C1 5480:1 898..1	nap						0.42	ATL8C1 5480:1 698..4 11	g46462 32	62	2236		4.4e- 228	(AC007 266) putati ve ligand -gated ion channe l protei n [Arabi dopsis thalia na]
167102	ATU029 042	ATL8C3 521:1. .672	nap						0.41	ATL8C3 521:49 2..672	g48951 72	62	202		3.5e- 20	(AC007 662) hypoth etical

167103	ATU029 043	ATL8C4 7684:1 ..923	nap					ATL8C4 7684:4 07..89 5	0.41	g37575 18	62	995	2.7e- 98	protein [Arabidopsis thaliana] (AC005167) putative immediate- early salicylate- induced glucosyltran- sferase [Arabidopsis thaliana]
167104	ATU029 044	ATL8C8 922:28 02..43 58	nap							g99664	62	59	0.055	auxin- induced protein AUX2- 27 - Arabidopsis thaliana
167105	ATU029 045	ATL8C4 3420:1 ..1126	nap							g21601 61	62	530		(AC000132) F21M12 .7

167106	ATU029 046	ATL8S5 160:1. .403	nap										g13393 8	62	197	4.4e- 15	gene product [Arabi dopsis thalia nal]
167107	ATU029 047	ATL8S2 9055:6 01..1	nap										g42404 19	62	188	3.4e- 16	(AF080 235) oxidor educta se homolo g [Strep tomyce s cyanog enus]
167108	ATU029 048	ATL8C4 262:11 1..354	nap										g18711 79	62	151	6.6e- 14	(U9043 9) FMRFam ide precu sor isolog [Arabi dopsis thalia]

167109	ATU029 049	ATL8C1 1718:1 719..2 311	nap								g48352 37	62	340	2.5e- 32	nal (AL049 862) putati ve clathr in coat assemb ly protei n [Arabi dopsis thalia nal]
167110	ATU029 050	ATL8S3 0492:3 78..38	nap								g19064 11	62	126	3.7e- 08	(U4853 2) ORF228 0 gene homolo g [Mirab ilis nyctag inea]
167111	ATU029 051	ATL8C3 1971:1 352..1	nap								g17070 07, g45393 94	62, 51	686, 697	6.2e- 66, 1.6e- 67	(U7872 1) hypoht etical protei n [Arabi dopsis thalia nal]; (AL035 526) putati ve

167112	ATU029 052	ATL8C3 6507:1 041..1 664	nap								g17325 11	62	599	5.3e- 32	protein [Arabi dopsis thalia na] (U6274 2) Ran bindin g protei n 1 homolo g [Arabi dopsis thalia na]
167113	ATU029 053	ATL8C8 4:833. .1000	nap								g36954 08	62	193	1.9e- 09	(AF096 373) contai ns simila rity to Solanu m lycope rsicum (tomat o) wound- induce d protein (GB:X5 9882) [Arabi dopsis

167120	ATU029 060	ATL8C3 2724:3 79..23 43	nap										g28516 27	62	112	5.3e- 06	SITE) LYASE) [Synec hocyst is sp.] HYPOTH ETICAL 46.8 KD PROTEI N IN BASS- ADIY INTERG ENIC REGION [Esche richia coli]
167121	ATU029 061	ATL8S2 1202:1 ..402	nap										g18257 39	62	138	0.53	(U8830 9) T23B3. 5 gene produc t [Caeno rhabdi tis elegan s]
167122	ATU029 062	ATL8C1 0441:1 ..698	nap										g17641 00	62	1163		(U8180 5) GDP-D- mannos e-4,6- dehydr atase [Arabi dopsis]

167123	ATU029 063	ATL8C2 4035:1 551..5 04	nap									g22136 01	62	930	1.5e- 97	(AC000 348) T7N9.2 1 [Arabi dopsis thalia na]
167124	ATU029 064	ATL8C1 5709:7 93..38	nap									g43887 33	62	831	2.0e- 85	(AC006 413) putati ve transp osase protei n [Arabi dopsis thalia na]
167125	ATU029 065	ATL8S9 157:1. .506	nap									g41553 85	62	111	0.031	(AE001 511) putati ve [Helic obacte r pylori J99]
167126	ATU029 066	ATL8C1 6261:2 021..2 668	nap									g42630 62	62	128	1.8e- 06	(AC005 142) hypoth etical protei n [Arabi dopsis thalia na]

167127	ATU029 067	ATL8C3 2102:1 ..647	nap							g16193 00	62	108	1.6e- 10	na] (X9526 9) LRR protei n [Lycop ersico n escule ntum]
167128	ATU029 068	ATL8S5 454:30 ..607	nap						1.00	g26653 88	61	385	2.8e- 16	(AB002 814) cyclop hilin G [Tachy pleus triden tatus]
167129	ATU029 069	ATL8S9 038:76 8..575	nap							g42204 78	62	199	2.3e- 15	(AC006 069) hypoth etical protei n [Arabi dopsis thalia na]
167130	ATU029 070	ATL8S2 8947:3 96..1	nap							g15684 80	62	176	3.7e- 18	(Z7170 3) cdc2- like protei n kinase [Beta vulgar is]
167131	ATU029	ATL8S2	nap							g19047	62	118	0.0034	(K0257

167132	071	8493:1 ..324								4					118	4.8e-09	PROBAB LE CLPP- LIKE PROTEA SE (ENDOP EPTIDA SE CLP) (ORF 203) [March antia polymo rpha]
167133	ATU029 073	ATL8C5 0068:1 ..661	nap							g32585 72	62	400	4.9e-39	(U8995 9) Hypoth etical protei n [Arabi dopsis thalia na]			
167134	ATU029 074	ATL8C1 068:16 66..1	nap							g47739 20	62	1565	4.1e-163	(AF147 259) F10A2. 17			

167135	ATU029 075	ATL8C4 7042:3 260..6 25	nap									g19316 53	62	1537	3.4e- 164	(U9597 3) unknown protein [Arabi dopsis thalia na]
167136	ATU029 076	ATL8C4 5271:1 295..2 660	nap									g49268 66	62	714	5.6e- 79	(AC007 509) putati ve amp- bindin g protei n [Arabi dopsis thalia na]
167137	ATU029 077	ATL8C1 7972:2 237..3 564	nap									g31281 74	62	368		(AC004 521) hypoth etical protei n [Arabi dopsis thalia na]

167142	ATU029 082	ATL8S6 125:98 ..575	nap			ATL8S6 125:24 5..451	0.98	g29245 07	61	329		(AL022 023) cyclop hilin- like protei n [Arabi dopsis thalia nal]
167143	ATU029 083	ATL8C2 5173:1 ..1287	nap			ATL8C2 5173:1 03..12 79	0.97	g45803 98	61	865	8.3e- 88	(AC007 171) putati ve protei n kinase APK1A [Arabi dopsis thalia nal]
167144	ATU029 084	ATL8C3 7649:1 ..725	nap			ATL8C3 7649:3 07..72 2	0.97	g14916 17	61	487	4.6e- 51	(X9995 2) peroxi dase [Arabi dopsis thalia nal]
167145	ATU029 085	ATL8S1 1295:6 08..1	nap			ATL8S1 1295:5 54..23	0.96	g30250 47	61	224	2.8e- 14	HYPOTH ETICAL 36.3 KD PROTEI N IN PEPN- PYRD INTERG

167146	ATU029 086	ATL8C4 0325:1 ..937	nap						ATL8C4 0325:1 14..93 7	0.96		g42635 48	61	927	1.7e- 97	ENIC REGION [Esche richia coli]
																(AC006 250) putati ve En/Spm transp oson protei n (mosai c protei n) [Arabi dopsis thalia na]
167147	ATU029 087	ATL8C1 4132:6 87..1	nap						ATL8C1 4132:6 87..49	0.95		g31538 89	61	451	3.3e- 36	(AF065 444) root iron transp orter protei n [Pisum sativu m]
167148	ATU029 088	ATL8C4 1734:1 766..1 190	nap						ATL8C4 1734:1 722..1 190	0.94		g40975 47	61	263	5.0e- 11	(U6490 6) ATFP3 [Arabi dopsis thalia na]

167149	ATU029 089	ATL8C4 4436:5 43..16 34	nap			ATL8C4 4436:5 43..12 74	0.94	g38941 65	61	726	1.5e- 68	(AC005 312) hypo- thetical protein [Arabi dopsis thalia na]
167150	ATU029 090	ATL8C1 5869:3 665..1	nap			ATL8C1 5869:3 354..3 060	0.94	g38602 71	61	547	8.1e- 68	(AC005 824) putati- ve seleni- um- bindin- g protein [Arabi dopsis thalia na]
167151	ATU029 091	ATL8C3 9118:1 ..1222	nap			ATL8C3 9118:6 2..122 2	0.92	g23350 94	61	1088	4.8e- 107	(AC002 339) putati- ve polyga- lactur- onase [Arabi dopsis thalia na]
167152	ATU029 092	ATL8C3 754:13 08..1	nap			ATL8C3 754:13 08..23 9	0.91	g45126 60	61	1300	3.1e- 114	(AC006 931) hypo- thetical protein

167153	ATU029 093	ATL8C1 5037:1 85..10 90	nap					ATL8C1 5037:1 85..10 39	0.91	g39351 61	61	636	1.3e- 69	n [Arabi dopsis thalia nal] (AC004 557) F17L21 .4 [Arabi dopsis thalia nal]
167154	ATU029 094	ATL8C3 6066:1 441..1	nap					ATL8C3 6066:1 360..5 2	0.91	g46783 63	61	446	6.1e- 43	(AL049 659) putati ve protei n [Arabi dopsis thalia nal]
167155	ATU029 095	ATL8C4 7996:2 809..1	nap					ATL8C4 7996:2 725..1 174	0.90	g40637 40, g35229 45	61, 45	648, 324	3.2e- 48, 5.5e- 22	(AC005 851) putati ve Na/H antipo rter [Arabi dopsis thalia nal]; (AC004 411) putati ve cytoch rome

167156	ATU029 096	ATL8C1 4684:6 92..1	nap					ATL8C1 4684:6 01..73	0.89	g24293 62	61	131	0.9999 3	(AF020 261) prolin e rich protei n [Santa lum album]	P450 [Arabi dopsis thalia na]
167157	ATU029 097	ATL8C1 7688:2 93..12 31	nap					ATL8C1 7688:2 93..12 31	0.89	g36680 82	61	126	0.077	(AC004 667) putati ve DAL1 protei n [Arabi dopsis thalia na]	
167158	ATU029 098	ATL8C2 2607:2 61..56 5	nap					ATL8C2 2607:2 61..55 6	0.89	g39534 64	61	175	0.80	(AC002 328) F20N2. 9 [Arabi dopsis thalia na]	
167159	ATU029 099	ATL8C3 7465:1 ..1710	nap					ATL8C3 7465:1 75..17 10	0.87	g45389 23	61	1180		(AL049 483) predic ted protei n destin	

103	7483:1 ..1103					7483:5 1..778	86					1) AlkB [Caulo bacter cresce ntus]
167164	ATU029 104	ATL8C1 6387:2 155..7 94	nap			ATL8C1 6387:1 440..7 94	g45880 01	61	310	3.0e- 16	(AF085 279) hypoth etical Ser- Thr protei n kinase [Arabi dopsis thalia nal]	
167165	ATU029 105	ATL8C3 7183:9 4..153 4	nap			ATL8C3 7183:9 4..143 4	g36953 88	61	414		(AF096 371) No defini tion line found [Arabi dopsis thalia nal]	
167166	ATU029 106	ATL8C4 4344:1 ..351	nap			ATL8C4 4344:1 22..35 1	g44163 26	61	140	1.1e- 07	(AF105 293) methio nine aminop eptida se like protei n; MAP	

167167	ATU029 107	ATL8C2 4944:8 71..19 48	nap				ATL8C2 4944:1 355..1 889	0.75	g45672 29	61	980	4.5e- 73	[Alexa ndrium fundye nse] (AC007 119) putati ve pectin methyl estera se [Arabi dopsis thalia na]
167168	ATU029 108	ATL8C2 01:187 2..252	nap				ATL8C2 01:141 2..308	0.75	g33343 49	61	1005	4.5e- 80	GLYCYL -TRNA SYNTH TASE (GLYCI NE-- TRNA LIGASE) (GLYRS) [Arabi dopsis thalia na]
167169	ATU029 109	ATL8C2 893:26 5..224 1	nap				ATL8C2 893:26 5..206 9	0.74	g47739 20	61	971	1.2e- 70	(AF147 259) F10A2. 17 gene produc t [Arabi dopsis

167170	ATU029 110	ATL8C1 6680:1 ..3865	nap				ATL8C1 6680:2 08..38 65	0.73		g45103 68	61	376	2.0e- 28	thalia na] (AC007 017) putati ve transc riptio n factor E2F5 [Arabi dopsis thalia na]
167171	ATU029 111	ATL8C3 9246:1 ..312	nap				ATL8C3 9246:2 7..306	0.73		g45811 62	61	176	4.1e- 08	(AC006 220) putati ve symbio sis- relate d protei n [Arabi dopsis thalia na]
167172	ATU029 112	ATL8C1 8178:2 899..5 96	nap				ATL8C1 8178:2 796..6 06	0.72		g45875 50	61	463	2.2e- 37	(AC006 577) EST gb R64 848 comes from this gene. [Arabi dopsis

167173	ATU029 113	ATL8C2 1741:1 ..2119	nap					ATL8C2 1741:4 15..17 30	0.72		g18711 85	61	166	4.5e- 15	thalia na] (U9043 9) seven in absent ia isolog [Arabi dopsis thalia na]
167174	ATU029 114	ATL8C9 945:1. .1438	nap					ATL8C9 945:55 ..761	0.71		g36953 95	61	1495	2.0e- 108	(AF096 372) contai ns simila rity to revers e transc riptas e (Pfam: PF0007 8 rvt, E=4.3e -08) [Arabi dopsis thalia na]
167175	ATU029 115	ATL8C2 2956:1 470..4 638	nap					ATL8C2 2956:1 470..3 695, ATL8C2 2956:4	0.70, 0.99		g48369 30	61	3120	2.4e- 310	(AC006 085) Hypoth etical protei n

167176	ATU029 116	ATL8C2 8804:7 15..1	nap					558..4 354	0.70	g30470 61	61	326	5.2e- 36	[Arabi dopsis thalia na] (AF058 825) simila r to Arabid opsis thalia na retrot ranspo son Ta11-1 (GB:(L 47193) [Arabi dopsis thalia na]
167177	ATU029 117	ATL8C4 1407:1 1815.. 10469	nap					ATL8C4 1407:1 1785.. 10469	0.70	g43887 32	61	624	7.6e- 36	(AC006 413) putati ve Athila retroe lement ORF 2 protei n [Arabi dopsis thalia na]
167178	ATU029 118	ATL8C3 5748:1 296..2 757	nap					ATL8C3 5748:1 296..2 686	0.70	g29247 85	61	1895	1.3e- 175	(AC002 334) simila r to r to

167186	ATU029 126	ATL8S2 615:42 7..1	nap							7	ATL8S2 615:42 7..49	0.65	g11843 8	61	118	2.2e- 08	ve Athila retroee lement ORF1 protei n [Arabi dopsis thalia na]
167187	ATU029 127	ATL8C4 4789:5 87..10 48	nap								ATL8C4 4789:8 94..59 6	0.64	g31282 00	61	605	1.1e- 61	(AC004 521) unknow n protei n [Arabi dopsis thalia na]

167188	ATU029 128	ATL8C1 3741:9 ..870	nap				ATL8C1 3741:9 ..829	0.64	g45586 69	61	351	3.4e- 36	(AC007 063) putati ve vanada te resist ance protei n [Arabi dopsis thalia nal]
167189	ATU029 129	ATL8C3 6411:1 ..2223	nap				ATL8C3 6411:5 38..20 38	0.63	g28326 19, g28326 20	61, 44	754, 502	1.3e- 54, 5.6e- 49	(Al021 711) major intrin sic protei n (MIP)- like [Arabi dopsis thalia nal]; (Al021 711) hypoth etical protei n [Arabi dopsis thalia nal]
167190	ATU029 130	ATL8C4 0591:3 016..2	nap				ATL8C4 0591:1 366..2	0.63, 0.66	g45443 72	61	1524	2.8e- 244	(AC006 920) putati

167191	ATU029 131	17	nap	ATL8S2 0753:5 66..1	ATL8S2 0753:4 19..15 9	0.63	g11975 61	61	344	2.0e- 26	(U4713 3) NosF protei n [Rhizo bium melilo til]	ve revers e transc riptas e [Arabi dopsis thalia na]
167192	ATU029 132	ATL8C9 511:1. .878	nap	ATL8C9 511:59 ..878	ATL8C9 511:59 ..878	0.63	g36680 81	61	158	8.le- 21	(AC004 667) putati ve peptid ase [Arabi dopsis thalia na]	e transc riptas e [Arabi dopsis thalia na]
167193	ATU029 133	ATL8C1 9596:1 ..2416	nap	ATL8C1 9596:1 354..2 416	ATL8C1 9596:1 354..2 416	0.63	g29824 37	61	592	1.le- 48	(AL022 224) terpen e cyclas e like protei n [Arabi dopsis thalia na]	e transc riptas e [Arabi dopsis thalia na]

167194	ATU029 134	ATL8S1 4519:5 85..1	nap				ATL8S1 4519:5 85..7	0.60	g54952 9	61	371	2.1e- 30	na]
167195	ATU029 135	ATL8S1 0888:2 12..61 7	nap				ATL8S1 0888:2 12..50 6	0.59	g38754 05	61	140	1.3e- 10	(Z8105 2) predic ted using Genefi nder; Simila rity to Mouse diamin e acetyl transf erase (SW:AT DA_MOU SE) [Caeno rhabdi tis elegan s]
167196	ATU029	ATL8C9	nap				ATL8C9	0.58	g33193	61	2097	1.1e-	(AF077

167199	ATU029 139	ATL8C2 2905:1 ..2251	nap				ATL8C2 2905:1 65..18 61	0.56		g22449 63	61	671	3.0e- 74	thalia na] (Z9734 0) hypoth etical protei n [Arabi dopsis thalia na]
167200	ATU029 140	ATL8C3 9372:1 943..1	nap				ATL8C3 9372:1 721..6 7	0.54		g20766 23, g78787	61, 58	108, 121	6.1e- 14, 3.1e- 14	(Z9515 1) PtrB [Mycob acteri um leprae]; protei nase II (EC 3.4.21 .-) - Escher ichia coli [Esche richia coli]
167201	ATU029 141	ATL8C4 8345:5 01..1	nap				ATL8C4 8345:4 43..60	0.53		g44550 81	61	152	3.5e- 11	(AF119 621) Ditr [Pseud omonas abiet niphil a]
167202	ATU029	ATL8S2	nap				ATL8S2	0.52		g15725	61	66	0.0011	(U6719

167206	ATU029 146	ATL8C2 9655:1 ..2898	nap						ATL8C2 9655:1 94..28 98	0.47	g31281 74	61	492	4.3e- 32	E- PHOSPH ATE SYNTHA SE 1 (UDP- GLUCOS E- FRUCTO SE- PHOSPH ATE GLUCOS YLTRAN SFERAS E 1) [Citru s unshiu]
167207	ATU029 147	ATL8C4 5267:3 88..1	nap						ATL8C4 5267:3 64..11 8	0.46	g41853 09	61	663	2.1e- 49	(AF090 446) unknow n [Zea mays]
167208	ATU029 148	ATL8S2 9893:4 40..1	nap						ATL8S2 9893:4 40..27	0.44	g16524 57	61	355	1.5e- 30	(D9090 5) rehydr in

167209	ATU029 149	ATL8C2 3314:2 2..695	nap						ATL8C2 3314:2 2..667	0.44		g46618 5	61	221	1.4e- 15	[Synec hocyst is sp.] HYPOTH ETICAL 29.6 KD PROTEI N IN RIBT- DADB INTERG ENIC REGION (ORFX7) [Bacil lus subtil is]
167210	ATU029 150	ATL8C3 4003:7 33..14 7	nap						ATL8C3 4003:6 67..14 7	0.41		g45862 45	61	563	4.8e- 48	(Al049 640) putati ve protei n [Arabi dopsis thalia nal
167211	ATU029 151	ATL8C4 9109:1 ..1106	nap						ATL8C4 9109:1 82..35 1	0.40		g32929 70	61	116	2.5e- 10	(Y1557 2) R51H3 [Homo sapien s]
167212	ATU029 152	ATL8C1 6057:8 98..16	nap									g14028 83	61	151	1.2e- 11	(X9813 0) unknow

167223	ATU029 163	ATL8S2 3041:1 ..430	nap									g17299 93	61	399	2.1e- 38	TOLQ PROTEI N [Pseud omonas aerugi nosa]
167224	ATU029 164	ATL8C1 2870:1 ..1167	nap									g42493 84	61	891	4.1e- 92	(AC005 966) Simila r to [Arabi dopsis thalia nal]
167225	ATU029 165	ATL8C1 6386:6 76..1	nap									g46782 70	61	1050	5.0e- 103	(AL049 660) protei n kinase -like protei n [Arabi dopsis thalia nal]
167226	ATU029 166	ATL8S2 5410:1 ..302	nap									g26752 3	61	179	2.1e- 15	HYPOTH ETICAL 18.2 KD PROTEI N IN PMI 5'REGI ON (ORF1) [Rhizo bium melilo]

167227	ATU029 167	ATL8C1 6017:3 283..1	nap									g35137 47	61	2490	1.2e- 256	(AF080 118) contai ns simila rity to revers e transc riptas es (Pfam; rvt.hm m, score: 11.19) [Arabi dopsis thalia na]
167228	ATU029 168	ATL8C4 9097:1 ..846	nap									g35401 81	61	421	5.2e- 35	(AC004 122) Unknow n protei n [Arabi dopsis thalia na]
167229	ATU029 169	ATL8C1 0933:2 872..2 16	nap									g33193 60	61	1912	5.8e- 162	(AF077 408) contai ns simila rity to Vicia

167230	ATU029 170	ATL8S1 5345:1 ..342	nap							g73088 8	61	101	0.0086	faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
167231	ATU029 171	ATL8C4 4160:9 57..11 24	nap							g45811 74	61	133	6.5e- 10	(AC006 220) hypoth etical protei n [Arabi dopsis thalia na]
167232	ATU029 172	ATL8C4 6748:5 50..1	nap							g48368 88	61	469	1.1e- 25	(AC007 369) Unknow n protei n [Arabi dopsis thalia na]

167237	ATU029 177	ATL8C2 6451:9 24..1	nap											g33554 71	61	512	2.2e- 47	caviae (AC004 218) putati ve lysoph osphol ipase [Arabi dopsis thalia na]
167238	ATU029 178	ATL8S1 8758:4 79..1	nap											g31834 16	61	185	2.3e- 16	TRANSC RIPTIO NAL REGULA TOR KDGR [Esche richia coli]
167239	ATU029 179	ATL8C3 52:224 7..513	nap											g49268 20	61	268	2.0e- 18	(AC004 135) T17H7. 5 [Arabi dopsis thalia na]
167240	ATU029 180	ATL8C1 6892:3 67..44	nap											g31526 21	61	101	3.8e- 10	(AC004 482) cold acclim ation protei n WCOR41 3-like [Arabi

167241	ATU029 181	ATL8C7 205:55 4..79	nap										g32362 46	61	363	4.1e- 37	dopsis thalia na] (AC004 684) putati ve expans in protei n [Arabi dopsis thalia na].
167242	ATU029 182	ATL8C2 5836:1 747..1	nap										g42636 55	61	2036	4.5e- 161	(AC006 136) putati ve revers e transc riptas e [Arabi dopsis thalia na]
167243	ATU029 183	ATL8S2 0178:3 56..56 0	nap										g21211 70	61	171	7.8e- 11	hypoth etical protei n (argF- lacZ region) - Escher ichia coli [Esche

167244	ATU029 184	ATL8C3 1969:6 32..23	nap										g33778 54	61	500	2.3e- 50	richia coli] (AF076 274) No defi nition line found [Arabi dopsis thalia na]
167245	ATU029 185	ATL8S2 7171:3 19..27	nap										g12885 9	61	239	7.8e- 20	NADH- PLASTO QUINON E OXIDOR EDUCTA SE SUBUNI T J (ORF 158) [Nicot iana tabacu m]
167246	ATU029 186	ATL8C4 2763:4 11..1	nap										g45585 65	61	354	8.0e- 23	(AC007 138) predic ted protei n of unknow n functi on [Arabi dopsis

167247	ATU029 187	ATL8C3 8210:1 ..922	nap									g23471 95	61	1268	1.2e- 91	thalia na] (AC002 338) hypoth etical protei n [Arabi dopsis thalia na]
167248	ATU029 188	ATL8C4 6794:1 651..3 992	nap									g40380 56, g40380 57	61, 31	2670, 781	1.3e- 272, 3.2e- 41	(AC005 897) putati ve transp oson [Arabi dopsis thalia na]; (AC005 897) hypoth etical protei n [Arabi dopsis thalia na]
167249	ATU029 189	ATL8C2 8216:1 8..126 1	nap									g38057 58	61	1745	5.9e- 174	(AC005 693) putati ve gag- protea se polypr

167250	ATU029 190	ATL8C2 48:1.. 416	nap										g47411 98	61	493	5.9e- 50	otein [Arabi dopsis thalia nal] (Al049 746) putati ve protei n [Arabi dopsis thalia nal]
167251	ATU029 191	ATL8C4 5783:1 ..381	nap										g40380 66	61	425	1.4e- 28	(AC005 897) hypoth etical protei n [Arabi dopsis thalia nal]
167252	ATU029 192	ATL8C1 7247:1 ..1505	nap										g45389 84	61	1290	4.0e- 133	(Al049 487) putati ve protei n [Arabi dopsis thalia nal]
167253	ATU029 193	ATL8C2 5158:1 308..2 88	nap										g36872 22	61	84	2.6e- 05	(AC005 169) hypoth etical protei

167254	ATU029 194	ATL8C1 6116:1 100..9 5	nap									g21300 38	61	735	4.3e- 79	n [Arabi dopsis thalia na] high affini ty nitrat e transp orter homolo g BCH1 - barley [Horde um vulgar e]
167255	ATU029 195	ATL8C9 244:1. .3453	nap									g45443 72	61	2979		(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
167256	ATU029 196	ATL8S1 3663:6 69..17	nap									g26882 97	61	203	1.3e- 05	(AE001 144) basic membra ne protei n D

167257	ATU029 197	ATL8C8 761:10 92..14 71	nap								g48862 86	61	229	7.8e- 21	(bnpD) [Borre lia burgdo rferil] (AL050 300) putati ve protei n [Arabi dopsis thalia nal]
167258	ATU029 198	ATL8C2 6134:8 99..16 41	nap								g46999 37	61	604	7.1e- 65	(AC007 166) hypoth etical protei n [Arabi dopsis thalia nal]
167259	ATU029 199	ATL8S3 0967:1 73..1	nap								g13506 34	61	108	1.2e- 05	CHLORO PLAST 50S RIBOSO MAL PROTEI N L23 [Sinap is alba]
167260	ATU029 200	ATL8C4 2596:7 26..1	nap								g45858 84	60	203	6.0e- 12	(AC005 850) Hypoth etical protei

167261	ATU029 201	ATL8C1 6379:6 84..18 2	nap					ATL8C1 6379:5 57..21 0	0.98	g33778 38	60	370	2.9e- 27	n [Arabi dopsis thalia na] (AF075 598) No defini tion line found [Arabi dopsis thalia na]
167262	ATU029 202	ATL8C1 2601:3 88..42	nap					ATL8C1 2601:3 86..77	0.98	g97121 9	60	333	1.4e- 26	(U2844 4) phosph oenolp yruvat e carbox ykinas e [Cteno cephal ides felis]
167263	ATU029 203	ATL8S3 6:587. .1	nap					ATL8S3 6:587. .54	0.96	g26230 45	60	172	8.8e- 17	(AE000 942) unknow n [Metha nobact erium thermo autotr ophicu m]

167264	ATU029 204	ATL8C4 6183:2 171..1 548	nap				ATL8C4 6183:2 125..1 649	0.95	g46999 36	60	782	4.6e- 59	(AC007 166) hypoth etical protei n [Arabi dopsis thalia na]
167265	ATU029 205	ATL8S3 0511:5 62..25 9	nap				ATL8S3 0511:5 13..25 9	0.95	g39708 11	60	293	2.2e- 25	(AJ130 846) 7,8- dihydr o-6- hydrox ymethy lpteri n - pyroph osphok inase [Pseud omonas fluore scens]
167266	ATU029 206	ATL8C3 168:58 ..878	nap				ATL8C3 168:94 ..522	0.94	g45672 95	60	1062	5.4e- 104	(AC006 918) putati ve pol ypr otei n [Arabi dopsis thalia na]
167267	ATU029 207	ATL8S1 8280:5 74..1	nap				ATL8S1 8280:4 92..10	0.94	g21480 95	60	458	5.3e- 42	TPP- depend ent aceto

167268	ATU029 208	ATL8C3 2927:1 ..1707	nap						ATL8C3 2927:2 ..1707	0.94		g47739 08	60	1317	2.1e- 136	n dehydr ogenas e beta chain - Clostr idium magnum [Clost ridium magnum]
167269	ATU029 209	ATL8C3 8770:6 72..52	nap						ATL8C3 8770:2 46..11 4	0.94		g48368 84	60	487	1.7e- 49	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
167270	ATU029 210	ATL8C1 5336:1 049..1	nap						ATL8C1 5336:9 51..62	0.93		g41853 10	60	1351	1.3e- 117	(AC007 260) Hypoth etical protei n [Arabi dopsis thalia na] (AF090 446) gag protei n [Zea

167271	ATU029 211	ATL8C2 1731:2 057..1	nap				ATL8C2 1731:2 057..1 074	0.93	g42638 30	60	1124	5.9e- 99	mays] (AC006 067) hypoth etical protei n [Arabi dopsis thalia na]
167272	ATU029 212	ATL8S6 542:61 1..1	nap				ATL8S6 542:50 1..17	0.90	g26422 20	60	72		(AF030 944) microf ilaria l sheath protei n SHP3 precu sor [Brugi a malayi]
167273	ATU029 213	ATL8S2 8660:5 83..1	nap				ATL8S2 8660:5 22..64	0.90	g23183 3	60	734	1.3e- 72	COBS PROTEI N [Pseud omonas denitr ifican s]
167274	ATU029 214	ATL8S2 3463:1 46..55 4	nap				ATL8S2 3463:1 46..51 5	0.89	g73126 7	60	312	4.3e- 28	RIBOSO MAL LARGE SUBUNI T PSEUDO URIDIN

167275	ATU029 215	ATL8C2 4007:8 49..10 0	nap					ATL8C2 4007:5 58..10 9	0.89	g28530 82	60	581	9.6e- 27	E SYNTHA SE A (PSEUD OURIDY LATE SYNTHA SE) (URACI L HYDROL YASE) [Esche richia colij (AL021 768) hypoth etical protei n [Arabi dopsis thalia na]
167276	ATU029 216	ATL8C1 475:58 8..1	nap					ATL8C1 475:58 8..76	0.88	g47339 67	60	319	1.1e- 27	(AC007 261) envelo pe- like protie n [Arabi dopsis thalia na]
167277	ATU029 217	ATL8C4 9014:1 246..1	nap					ATL8C4 9014:1 228..1 50	0.87	g16444 02	60	329	2.3e- 21	(U7352 4) putati ve

167278	ATU029 218	ATL8C3 879:1. .1261	nap					ATL8C3 879:65 ..1214	0.86	g45585 58	60	522	8.6e- 54	ATP/GT P- bindin g protei n [Homo sapien s]
167279	ATU029 219	ATL8C3 1967:1 717..1	nap					ATL8C3 1967:1 274..2 38	0.86	g30753 98	60	481	1.2e- 31	(AC007 138) putati ve polyga lactur onidas e [Arabi dopsis thalia na]
167280	ATU029 220	ATL8C8 259:1. .1262	nap					ATL8C8 259:39 2..119 1	0.86	g32490 76	60	909	1.4e- 101	(AC004 473) Simila r to beta glucos idase (bglA) gb X94

167281	ATU029 221	ATL8C1 416:22 55..68 84	nap							0.86	g45443 71	60	310	3.7e- 33	(AC006 920) hypoth etical protei n [Arabi dopsis thalia na]
167282	ATU029 222	ATL8C3 2298:1 ..520	nap							0.85	g45394 17	60	297	1.8e- 27	(AL049 171) putati ve protei n [Arabi dopsis thalia na]
167283	ATU029 223	ATL8C1 2985:4 571..5 097	nap							0.84	g44327 96	60	720	7.5e- 57	(AC006 437) putati ve vsf-1 protei n [Arabi dopsis thalia na]

167284	ATU029 224	ATL8C9 382:1. .1796	nap				ATL8C9 382:1. .1248	0.84		g45672 83	60	394	2.1e- 30	na] (AC006 841) unknown protein [Arabi dopsis thalia na]
167285	ATU029 225	ATL8C4 9759:1 355..4 04	nap				ATL8C4 9759:1 329..5 77	0.83		g44553 36	60	1177	1.1e- 111	(AL035 525) pectin esterase- like protein [Arabi dopsis thalia na]
167286	ATU029 226	ATL8C3 5275:1 335..2 549	nap				ATL8C3 5275:1 335..2 173	0.83		g34260 44	60	687	6.5e- 69	(AC005 168) putative AIG1 protein [Arabi dopsis thalia na]
167287	ATU029 227	ATL8C1 36:1.. 1288	nap				ATL8C1 36:33. .1267	0.83		g30804 27	60	625		(AL022 604) putative protein

167288	ATU029 228	ATL8C4 6010:4 411..7 755	nap					ATL8C4 6010:4 411..7 755	0.82		g28326 42	60	172	3.1e- 18	[Arabi dopsis thalia na] (AL021 710) putati ve protei n [Arabi dopsis thalia na]
167289	ATU029 229	ATL8C9 148:16 64..11 52	nap					ATL8C9 148:16 37..11 52	0.81		g38941 78	60	684		(AC005 312) putati ve nuclei c acid bindin g protei n [Arabi dopsis thalia na]
167290	ATU029 230	ATL8C2 0962:9 16..15 0	nap					ATL8C2 0962:7 92..26 4	0.81		g21911 37	60	898	3.2e- 93	(AF007 269) simila r to the GDSL family of lipoly tic enzyme s

167291	ATU029 231	ATL8C2 4645:2 481..7 18	nap							ATL8C2 4645:2 481..7 18	0.80		g43097 51	60	808	1.8e- 74	[Arabi dopsis thalia na] (AC006 217) hypo thetical protei n [Arabi dopsis thalia na]
167292	ATU029 232	ATL8C3 4372:1 ..1490	nap							ATL8C3 4372:1 03..14 27	0.79		g42635 22	60	857	1.5e- 82	(AC004 044) hypo thetical protei n [Arabi dopsis thalia na]
167293	ATU029 233	ATL8C3 5491:1 ..708	nap							ATL8C3 5491:3 15..65 0	0.79		g26659 4	60	101	6.4e- 10	MYROSI NASE MB2 (SINIG RINASE) (THIOG LUCOSI DASE) [Sinap is alba]
167294	ATU029 234	ATL8C3 2578:1 ..705	nap							ATL8C3 2578:6 64..29 9	0.78		g37023 33	60	135	5.1e- 14	(AC005 397) hypo thetical

167295	ATU029 235	ATL8C3 4464:1 ..596	nap					ATL8C3 4464:3 59..26 9	0.78	g38205 78	60	147	2.8e- 11	protein [Arabidopsis thaliana] (AF084 242) GTP- bindin g protein; Cgpa [Caulo bacter cresce ntus]
167296	ATU029 236	ATL8S1 8828:1 ..523	nap					ATL8S1 8828:5 7..509	0.78	g25014 02	60	429	3.7e- 21	PROBAB LE PEPTID E ABC TRANSP ORTER PERMEA SE PROTEI N Y4TQ [Rhizo bium sp. NGR234]
167297	ATU029 237	ATL8C4 4349:1 ..1042	nap					ATL8C4 4349:2 45..10 42	0.77	g33778 53	60	764	1.8e- 67	(AF076 274) No defini tion line found

167302	ATU029 242	ATL8C3 36:1.. 1859	nap						99	0.74	g29808 07	60	82	2.3e- 11	educta se requir ed for shoot apex develo pment= FEY [Arabi dopsis thalia na]
									ATL8C3 36:192 ..1759						(AL022 197) hypoth etical protei n [Arabi dopsis thalia na]
167303	ATU029 243	ATL8C3 3822:9 33..1	nap						ATL8C3 3822:9 33..19	0.73	g49268 21	60	211		(AC004 135) T17H7. 6 [Arabi dopsis thalia na]
167304	ATU029 244	ATL8C2 6188:1 ..1831	nap						ATL8C2 6188:2 96..17 98	0.73	g41065 15	60	418	3.3e- 36	(AF092 743) CAK associ ated cyclin H homolo g

167305	ATU029 245	ATL8C2 3391:6 87..1	nap					ATL8C2 3391:6 87..54	0.73	g38057 61	60	909	5.0e- 80	[Popul us tremul ax Populu s tremul oides] (AC005 693) unknow n protei n [Arabi dopsis thalia na]
167306	ATU029 246	ATL8C1 6989:1 07..29 89	nap					ATL8C1 6989:1 07..29 89	0.73	g43097 48	60	1201	7.0e- 119	(AC006 217) hypoth etical protei n [Arabi dopsis thalia na]
167307	ATU029 247	ATL8C4 5074:1 ..1858	nap					ATL8C4 5074:6 0..185 8	0.72	g29807 69	60	280	8.1e- 27	(AL022 198) hypoth etical protei n [Arabi dopsis thalia na]
167308	ATU029 248	ATL8S8 348:18	nap					ATL8S8 348:18	0.72	g13621 08	60	204	5.2e- 11	histon e H3

167309	ATU029 249	5..608	nap					5..386	0.72	g45859 70	60	376	2.3e- 32	homolo g - common tobacc o [] (AC005 287) Hypoth etical protei n [Arabi dopsis thalia nal]
167310	ATU029 250	ATL8C2 8493:1 001..1	nap					ATL8S1 7653:3 75..55	0.71	g26502 93	60	99	2.2e- 06	(AE001 081) trypto phan repres sor bindin g protei n (wrbA) [Archaeo globus fulgidus]
167311	ATU029 251	ATL8C2 6496:1 010..1	nap					ATL8C2 6496:8 34..12	0.69	g21295 15	60	1201	5.1e- 114	1- amino- 1- cyclop ropane carbox ylate syntha se -

167312	ATU029 252	ATL8C1 2659:1 ..2071	nap					ATL8C1 2659:3 78..11 14	0.68	g47037 3	60	62	0.0029	(U0004 7) ZK418. 5 gene produc t [Caeno rhabdi tis elegan s]	Arabid opsis thalia na [Arabi dopsis thalia na]
167313	ATU029 253	ATL8C2 0374:1 ..827	nap					ATL8C2 0374:5 8..812	0.67	g34829 75	60	331	1.7e- 38	(AL031 369) putati ve protei n [Arabi dopsis thalia na]	Arabid opsis thalia na [Arabi dopsis thalia na]
167314	ATU029 254	ATL8C1 9593:6 70..10 63	nap					ATL8C1 9593:9 80..75 5	0.67	g42622 14	60	593	3.0e- 57	(AC006 161) hypoth etical protei n [Arabi dopsis thalia na]	Arabid opsis thalia na [Arabi dopsis thalia na]
167315	ATU029	ATL8C4	nap					ATL8C4	0.67	g46462	60	2623	3.0e-	(AC007	Arabid opsis thalia na [Arabi dopsis thalia na]

167318	ATU029 258	ATL8C1 4618:2 040..1 211	nap					ATL8C1 4618:1 844..1 211	0.64	g45126 74	60	1309	1.0e- 90	protein (glnQ) [Archaea] eoglobus fulgidus]
167319	ATU029 259	ATL8C4 0807:5 57..97	nap					ATL8C4 0807:3 17..25 7	0.64	g42001 22	60	393	1.2e- 34	(AC006 931) hypothetical protein [Arabidopsis thaliana] na]
167320	ATU029 260	ATL8S1 2658:5 45..32	nap					ATL8S1 2658:5 24..32	0.64	g11631 14	60	226	7.9e- 11	(U4352 6) ORF-4 [Streptococcus pneumoniae]
167321	ATU029 261	ATL8S2 2426:5 30..1	nap					ATL8S2 2426:4 63..13 8	0.62	g11756 78	60	474	5.9e- 32	HYPOTHETICAL 32.7 KD

167322	ATU029 262	ATL8C4 3017:1 ..1809	nap					ATL8C4 3017:1 98..17 23	0.59	g44327 98	60	1186	1.9e- 95	PROTEIN IN TRPL- BTUR INTERG ENIC REGION (ORF4) [Esche- richia coli]
167323	ATU029 263	ATL8C4 6947:2 125..3 782	nap					ATL8C4 6947:2 134..3 598	0.59	g40380 49	60	1903	3.5e- 196	(AC005 897) hypoth- etical protein [Arabi- dopsis thalia na]
167324	ATU029 264	ATL8C3 2289:1 ..1910	nap					ATL8C3 2289:1 334..1 871	0.54	g33866 11	60	713	8.3e- 67	(AC004 665) unknown protein [Arabi- dopsis thalia na]

167325	ATU029 265	ATL8C3 8357:4 96..10 52	nap				ATL8C3 8357:6 06..99 3	0.53	g18711 88	60	149	1.1e- 16	na] (U9043 9) Zinc finger protei n 8, ZFP8 [Arabi dopsis thalia na]
167326	ATU029 266	ATL8C3 3375:1 ..684	nap				ATL8C3 3375:8 0..662	0.53	g31278 44	60	786	1.5e- 79	(AL023 496) hypoth etical protei n [strep tomyce s coelic olor]
167327	ATU029 267	ATL8C1 5640:1 ..2770	nap				ATL8C1 5640:6 89..25 12	0.52	g47738 94	60	772	6.5e- 70	(AF076 243) hypoth etical protei n [Arabi dopsis thalia na]
167328	ATU029 268	ATL8C2 2875:8 27..52	nap				ATL8C2 2875:5 27..52	0.52	g44172 93	60	917	1.3e- 87	(AC007 019) unknow n protei n [Arabi

167329	ATU029 269	ATL8C1 5899:1 ..528	nap					ATL8C1 5899:5 6..501	0.52	g27393 87	60	178	9.7e- 18	dopsis thalia nal (AC002 505) hypoth etical protei n [Arabi dopsis thalia nal]
167330	ATU029 270	ATL8C3 0138:8 67..1	nap					ATL8C3 0138:8 67..54	0.52	g13635 28	60	1008	7.3e- 103	gag protei n - maize [Zea mays]
167331	ATU029 271	ATL8C2 0946:1 ..945	nap					ATL8C2 0946:4 10..77 4	0.52	g47339 92	60	1021	1.6e- 104	(AC007 188) putati ve pol ypr otei n [Arabi dopsis thalia nal]
167332	ATU029 272	ATL8C1 8113:1 ..1569	nap					ATL8C1 8113:2 2..152 6	0.51	g45393 94	60	806	3.1e- 80	(AL035 526) putati ve protei n [Arabi dopsis thalia nal]
167333	ATU029	ATL8S2	nap					ATL8S2	0.50	g12817	60	317	5.6e-	LOW-

273	8993:1 ..584				8993:2 3..584	0	30	MOLECU LAR WEIGHT COBALT - CONTAI NING NITRIL E HYDRAT ASE SUBUNI T ALPHA (L- NITRIL ASE) (L- NHASE) [Rhodo coccus rhodoc hrous]
167334	ATU029 274	nap			ATL8C1 0867:2 877..4 22	0.50	2159 60	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467)

167335	ATU029 275	ATL8C4 8386:1 516..1	nap						ATL8C4 8386:1 510..9 4	0.50		g45393 86	60	2321	2.8e- 200	[Arabi dopsis thalia na] (AL035 526) extens in- like protei n [Arabi dopsis thalia na]
167336	ATU029 276	ATL8C9 857:70 1..183 7	nap						ATL8C9 857:10 54..16 92	0.49		g22135 87	60	1177	7.1e- 93	(AC000 348) T7N9.7 [Arabi dopsis thalia na]
167337	ATU029 277	ATL8S2 7536:1 ..451	nap						ATL8S2 7536:3 17..15 4	0.48		g13360 82	60	510	5.4e- 47	(U5663 4) Glycin e max var. Centur y ascorb ate peroxi dase 2 (APx2) mRNA, comple te cds [Glyci ne max]

167338	ATU029 278	ATL8C1 9992:3 77..1	nap				ATL8C1 9992:3 77..12 8	0.47	g23471 89	60	241	3.3e- 22	(AC002 338) hypoth etical protein [Arabi dopsis thalia na]
167339	ATU029 279	ATL8C4 9951:1 940..3 163	nap				ATL8C4 9951:1 940..3 111	0.46	g37765 59	60	849	5.3e- 79	(AC005 388) Strong simila rity to gene F14J9. 26 [Arabi dopsis thalia na]
167340	ATU029 280	ATL8C1 39:571 ..2086	nap				ATL8C1 39:571 ..2037	0.46	g47340 15, g42622 10	60, 32	154, 187		(AC007 112) hypoth etical protein [Arabi dopsis thalia na]; (AC006 161) simila r to leucin e zipper

167341	ATU029 281	ATL8C3 9012:1 ..638	nap					ATL8C3 9012:4 4..638	0.43	g45858 77	60	178	1.4e- 19	(AC005 850) Hypoth etical protei n [Arabi dopsis thalia na]
167342	ATU029 282	ATL8C1 7250:1 042..1	nap					ATL8C1 7250:9 68..23 7	0.42	g27361 23	60	445	1.3e- 47	(AF020 842) RPB140 [Arist olochi a gigant ea]
167343	ATU029 283	ATL8C1 9573:1 ..2153	nap					ATL8C1 9573:5 7..204 7	0.41	g40637 40	60	450	2.6e- 41	(AC005 851) putati ve Na/H antipo rter [Arabi dopsis thalia na]
167344	ATU029 284	ATL8C7 941:1. ..923	nap					ATL8C7 941:59 9..178	0.41	g11755 22	60	23	0.095	ANKYRI N REPEAT

167345	ATU029 285	ATL8C4 707:60 4..100	nap							ATL8C4 707:24 3..127	0.40		g37383 36	60	154	6.4e- 07	(AC005 170) unknown protein [Arabi dopsis thalia na]	CONTAINING PROTEIN YARN [Saccharomyces cerevisiae]
167346	ATU029 286	ATL8C3 5951:1 196..7 39	nap										g45726 77	60	499	6.6e- 48	(AC006 954) hypothetical protein [Arabi dopsis thalia na]	
167347	ATU029 287	ATL8C4 4942:9 0..243 9	nap										g41851 31	60	197	2.1e- 14	(AC005 724) putative zinc finger protein [Arabi dopsis na]	

167364	303	8667:1 194..1 869									28	110	protein - maize [Zea mays]
	ATU029 304	ATL8C4 8203:2 23..16 36	nap								60	2.6e- 08	(U1788 7) bZIP protein [Arabi dopsis thalia na]
167365	ATU029 305	ATL8C7 227:1. .653	nap								60	5.6e- 55	(AL035 528) hypoth etical protein [Arabi dopsis thalia na]
167366	ATU029 306	ATL8C7 235:18 50..1	nap								60	4.4e- 05	(AC007 071) hypoth etical protein [Arabi dopsis thalia na]
167367	ATU029 307	ATL8C4 4840:1 144..1	nap								60	9.7e- 05	pollen - prefer ential protein n -

167368	ATU029 308	ATL8S1 4827:5 88..1	nap							944067 68	60	975	7.5e- 98	(AC006 836) putati ve flavon ol sulfot ransfe rase [Arabi dopsis thalia na]	trumpe t lily [Liliu m longif lorum]
167369	ATU029 309	ATL8C1 5499:4 491..6 059	nap							930803 74	60	507	5.3e- 51	(AL022 580) putati ve protei n [Arabi dopsis thalia na]	
167370	ATU029 310	ATL8C2 3211:1 ..494	nap							948952 24	60	204	1.2e- 21	(AC007 660) putati ve revers e transc riptas e [Arabi dopsis	

167375	ATU029 315	ATL8C3 4890:1 ..1289	nap										g31281 99	60	289	8.5e- 23	n kinase [Arabi dopsis thalia na]
167376	ATU029 316	ATL8C2 0612:1 ..689	nap										g39280 96	60	294	2.1e- 24	(AC005 770) hypoth etical protei n [Arabi dopsis thalia na]
167377	ATU029 317	ATL8C1 9794:1 ..1142	nap										g44688 04	60	658	1.5e- 67	(AL035 601) putati ve protei n [Arabi dopsis thalia na]
167378	ATU029 318	ATL8C3 7970:1 ..1599	nap										g45811 64	60	817	2.3e- 86	(AC006 220) putati ve

167379	ATU029 319	ATL8C3 1055:2 520..1	nap									g37790 21	60	2458	8.0e- 259	polypr otein [Arabi dopsis thalia na] (AC005 171) putati ve revers e transc riptas e [Arabi dopsis thalia na]
167380	ATU029 320	ATL8S9 040:1. .430	nap									g45393 59	60	475	4.4e- 47	(AL049 525) putati ve protei n [Arabi dopsis thalia na]
167381	ATU029 321	ATL8C7 650:70 8..1	nap									g23927 63	60	400	1.2e- 36	(AC002 534) hypothe tical protei n [Arabi dopsis thalia na]
167382	ATU029	ATL8S1	nap									g11084	60	119	0.10	prolin

167393	ATU029 333	ATL8C8 317:1. .886	nap										g34829 19	60	402	4.1e- 48	(AC003 970) Putati ve protei n kinase [Arabi dopsis thalia na]	transc riptas e [Gossy pium barbad ense]
167394	ATU029 334	ATL8C4 3408:1 457..1 163	nap										g37765 70	60	337		(AC005 388) Simila r to T3IE10 .22 [Arabi dopsis thalia na]	
167395	ATU029 335	ATL8C2 6118:1 563..1	nap										g13621 62	60	807	5.3e- 70	beta- glucos idase BQ60 precu sor - barley [Horde um vulgar e]	
167396	ATU029	ATL8S1	nap										g25013	60	214	1.2e-	HYPOTH	

336	1125:5 70..69									59				17	ETICAL TRANSK ETOLAS E FAMILY PROTEI N Y4MO [Rhizo bium sp. NGR234]
167397	ATU029 337	ATL8S2 7621:1 ..414	nap							g17097 93	60	123	3.0e- 05		SALIVA RY PROLIN E-RICH PROTEI N PO (ALLEL E M) (CONTA INS: PEPTID E P-D) [Homo sapien s]
167398	ATU029 338	ATL8C3 3429:1 583..1	nap							g42638 30	60	1455	2.3e- 126		(AC006 067) hypoth etical protei n [Arabi dopsis thalia na]
167399	ATU029 339	ATL8C3 3399:1 ..695	nap							g46783 36	60	397	4.6e- 38		(AL049 658) putati

167400	ATU029 340	ATL8C4 1591:1 ..671	nap							g49143 58	60	178	1.5e- 22	(AC007 289) hypoth etical protei n [Arabi dopsis thalia na]
167401	ATU029 341	ATL8C3 4393:8 70..1	nap					ATL8C3 4393:8 70..23 0	0.99	g36680 86	59	661	6.1e- 49	(AC004 667) unknow n protei n [Arabi dopsis thalia na]
167402	ATU029 342	ATL8C2 7663:1 129..1	nap					ATL8C2 7663:1 117..4 8	0.99	g26513 08	59	978		(AC002 336) putati ve myosin heavy chain [Arabi dopsis thalia na]
167403	ATU029 343	ATL8C4 9038:7	nap					ATL8C4 9038:8	0.98	g45389 64	59	792	1.0e- 81	(AL049 488)

		9..817					2..602							NAM/NA P like protei n [Arabi dopsis thalia nal]
167404	ATU029 344	ATL8C4 5261:1 712..3 90	nap				ATL8C4 5261:1 592..3 90	0.98	g28326 46	59	1096	1.3e- 100	(AL021 710) MuDR transp osable elemen t - like protei n [Arabi dopsis thalia nal]	
167405	ATU029 345	ATL8S2 4257:5 54..1	nap				ATL8S2 4257:3 62..19	0.98	g41847 0	59	328	9.7e- 27	HYPOTH ETICAL 36.3 KD PROTEI N IN DSBA- POLA INTERG ENIC REGION [Esche richia coli]	
167406	ATU029 346	ATL8C4 1453:6 69..26 65	nap				ATL8C4 1453:6 69..19 98	0.98	g27801 92	59	113	9.6e- 09	(AJ222 713) unnamed	

167407	ATU029 347	ATL8C3 8155:7 95..1	nap					ATL8C3 8155:7 74..15 9	0.98		g43252 82	59	488	8.5e- 54	protein product [Arabi dopsis thalia na]
167408	ATU029 348	ATL8S1 2758:6 2..561	nap					ATL8S1 2758:6 2..461	0.97		g31283 60	59	398	4.5e- 38	(AF010 496) 2- hydrox yhepta -2,4- diene- 1,7- dioate isomer ase/5- carbox ymethy 1-2- oxo- hex-3- ene- 1,7- dioate decarb oxylas e

167409	ATU029 349	ATL8C4 6773:1 347..3 38	nap					ATL8C4 6773:1 297..4 22	0.97	g28275 48	59	849	2.6e- 79	[Rhodo bacter capsul atus] (AL021 635) cytoch rome P450 - like protei n [Arabi dopsis thalia na]
167410	ATU029 350	ATL8S1 9399:5 10..1	nap					ATL8S1 9399:5 08..46	0.97	g49029 87	59	222	7.0e- 20	(D8353 6) Hypoth etical 31.3 kd protei n in alpA- gabD interg enic region (o273) [Esche richia coli]
167411	ATU029 351	ATL8C1 8625:9 08..1	nap					ATL8C1 8625:9 08..65	0.97	g46894 48	59	1374	3.3e- 145	(AC006 267) putati ve xylan endohy

167416	ATU029 356	ATL8C1 0226:1 574..1 314	nap				ATL8C1 0226:1 500..1 314	0.92	g40068 57	59	375		gen... [(Z9970 7) photos ystem II oxygen - evolvi ng comple x like protei n (parti al) [Arabi dopsis thalia na]
167417	ATU029 357	ATL8C2 0192:7 80..1	nap				ATL8C2 0192:4 90..10 1	0.91	g32506 89	59	1215	2.3e- 125	(Al024 486) chitin ase - like protei n [Arabi dopsis thalia na]
167418	ATU029 358	ATL8C4 4239:1 ..887	nap				ATL8C4 4239:1 83..88 7	0.91	g22448 60	59	499	9.0e- 77	(Z9733 7) cucumi sin [Arabi dopsis thalia na]

167419	ATU029 359	ATL8C4 8538:8 957..6 296	nap				ATL8C4 8538:8 909..7 539	0.91	g33193 60	59	2222	2.1e- 169	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
167420	ATU029 360	ATL8C2 142:1. .776	nap				ATL8C2 142:48 5..305	0.90	g22810 85	59	465	8.0e- 36	(AC002 333) CTR1 protei n kinase isolog [Arabi dopsis thalia na]
167421	ATU029 361	ATL8S2 9377:4 97..1	nap				ATL8S2 9377:4 97..27	0.90	g11769 80	59	177	2.9e- 07	HYPOTH ETICAL OXIDOR EDUCTA SE IN HTPG- ALDX INTERG

167422	ATU029 362	ATL8C2 836:14 24..31 64	nap						ATL8C2 836:14 24..31 48	0.89	g42046 95	59	447	8.7e- 41	ENIC REGION [Bacil lus subtil is] (AF117 062) putati ve inosit ol polyph osphat e 5- phosph atase At5P1 [Arabi dopsis thalia na]
167423	ATU029 363	ATL8C4 501:42 02..1	nap						ATL8C4 501:24 22..17 0, ATL8C4 501:42 02..32 12	0.89, 0.88	g45393 47	59	357	5.0e- 25	(AL035 539) putati ve growth regula tor protei n [Arabi dopsis thalia na]
167424	ATU029 364	ATL8S1 0597:4 9..498	nap						ATL8S1 0597:4 9..492	0.89	g11757 64	59	334	2.0e- 29	HYPOTH ETICAL OXIDOR EDUCTA SE

167425	ATU029 365	ATL8C2 7303:8 66..33	nap						ATL8C2 7303:1 96..33	0.89		g45672 95	59	790			HI1430 [Haemo philus influe nzae Rd]
167426	ATU029 366	ATL8C1 8750:1 897..1	nap						ATL8C1 8750:1 451..1 24	0.89		g63961 3	59	205	1.4e- 11		(S7293 1) T- cell recept or alpha chain consta nt region (c6.1A produc t, T- cell recept or alpha chain- c6.1A fusion protei n=c6.1 A-TCR C

167430	ATU029 370	ATL8S2 1164:1 ..458	nap							ATL8S2 1164:4 2..374	0.88					g42493 79	59	76	0.0002 6	(AC005 966) Strong simila rity to gb X82 030 chloro plast RNA bindin g protei n (RNPl) from Phaseo lus vulgar is. [Arabi dopsis thalia na]
167431	ATU029 371	ATL8S2 4609:5 71..1	nap							ATL8S2 4609:5 71..22 1	0.88					g24672 24	59	107	0.0001 2	(X9294 6) hypothe tical protei

167432	ATU029 372	ATL8C2 303:12 01..1	nap					ATL8C2 303:10 32..75	0.88	g30470 98	59	591	7.2e- 63	n [Lacto coccus lactis] (AF058 826) simila r to eukary otic protei n kinase domain s (Pfam: pkinas e.hmm, score: 171.43) [Arabi dopsis thalia na]
167433	ATU029 373	ATL8S1 641:57 7..1	nap					ATL8S1 641:50 6..38	0.88	g17305 53	59	492	8.1e- 25	PHOH- LIKE PROTEI N [Bacil lus subtil is]
167434	ATU029 374	ATL8C1 4064:1 183..1	nap					ATL8C1 4064:7 74..24	0.87	g45593 51	59	815	1.0e- 65	(AC006 585) hypoth etical protei n

167435	ATU029 375	ATL8C9 097:1. .4027	nap					ATL8C9 097:23 ..3538	0.87	g48504 04	59	2027		[Arabi dopsis thalia nal] (AC007 357) Simila r to gb AF0 38007 FIC1 gene from Homo sapien s and is a member of the PF 001 22 E1- E2 ATPase family . ESTs gb T45 045 and gb AA3 94473 come from this gene. [Arabi dopsis thalia nal] (AC004
167436	ATU029	ATL8C1	nap					ATL8C1	0.86	g32985	59	89	4.5e-	(AC004

167437	376	259:74 0..114 6					259:76 7..100 2	37	08	681) hypoth etical protei n [Arabi dopsis thalia na]
	ATU029 377	ATL8C4 6968:1 839..2 925	nap				ATL8C4 6968:1 839..2 491	0.86	872	(AC006 304) hypoth etical protei n [Arabi dopsis thalia na]
167438	ATU029 378	ATL8C4 3526:5 342..4 462	nap				ATL8C4 3526:5 170..4 462	0.86	298	(AC007 169) hypoth etical protei n [Arabi dopsis thalia na]
167439	ATU029 379	ATL8C1 2689:2 217..9 35	nap				ATL8C1 2689:1 426..1 017	0.85	416	(AC005 322) ESTs gb H36 249, gb AA5 9732 and gb AA6 51219 come

167440	ATU029 380	ATL8C4 027:1. .2906	nap					ATL8C4 027:51 9..290 6	0.84	g33193 60	59	2272	5.9e- 201	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
167441	ATU029 381	ATL8C1 6406:3 809..1	nap					ATL8C1 6406:3 809..9 87	0.83	g40380 56	59	1985	4.6e- 204	(AC005 897) putati ve transp oson [Arabi dopsis thalia na]
167442	ATU029 382	ATL8C4 6565:2	nap					ATL8C4 6565:2	0.83	g29613 74	59	3099	0.0	(AL022 141)

167443	ATU029 383	403..1	nap					403..9 0	0.82	g43766 60	59	151	8.4e- 14	(AE001 622) SAM- Depend ent Methyt ransfe rase [Chlam ydia pneumo niae]	putati ve diseas e resist ance protei n [Arabi dopsis thalia na]
167444	ATU029 384	ATL8S1 3462:4 26..1	nap					ATL8S1 3462:4 26..36	0.81	g40985 77	59	708	1.9e- 69	(U7973 5) RNA polyme rase ALPHA subuni t [Xanth omonas campes tris pv. campes tris]	
167445	ATU029 385	ATL8S2 4611:5 87..1	nap					ATL8C1 0739:4	0.80	g42630 62	59	336	1.2e- 35	(AC005 142)	

167446	ATU029 386	ATL8C8 85:131 4..406	nap				0..239 3	0.79	g45672 29	59	375	6.8e- 30	hypothetical protein [Arabidopsis thaliana] (AC007119) putative pectin methyl esterase [Arabidopsis thaliana]
167447	ATU029 387	ATL8S5 429:1. .435	nap				ATL8S5 429:74 ..435	0.79	g11841 2	59	118	0.72	DEDAN PROTEIN (DSG-1) PROTEIN [Escherichia coli]
167448	ATU029 388	ATL8C4 1760:1 350..1	nap				ATL8C4 1760:1 328..3 8	0.79	g42630 63	59	816	1.5e- 64	(AC005142) hypothetical protein [Arabidopsis thaliana]
167449	ATU029	ATL8S2	nap				ATL8S2	0.79	g19427	59	341	1.8e-	Chain

	389	8476:5 20..1							8476:5 06..40	22				28	B, Elonga tion Factor Comple x Ef- TuEF- Ts From Escher ichia Coli []
167450	ATU029 390	ATL8C4 7761:1 ..664	nap						ATL8C4 7761:5 72..63 2	0.79	g45859 93	59	147	4.1e- 09	(AC005 287) Simila r to serine /threo nine, kinase s [Arabi dopsis thalia na]
167451	ATU029 391	ATL8C3 4628:1 66..63 5	nap						ATL8C3 4628:1 66..57 7	0.78	g12607 8	59	188	1.6e- 17	LATE EMBRYO GENESI S ABUNDA NT PROTEI N D-34 (LEA D-34) [Sagui nus oedipu s]

167452	ATU029 392	ATL8C3 616:1. .2112	nap				ATL8C3 616:49 7..206 3	0.78	g44173 09	59	1971	1.7e- 178	(AC006 446) putati ve pol ypr otei with a revers e transc riptas e domain [Arabi dopsis thalia na]
167453	ATU029 393	ATL8C2 227:1. .838	nap				ATL8C2 227:19 6..781	0.77	g42635 48	59	599	3.0e- 60	(AC006 250) putati ve En/Spm transp oson protei n (mosai c protei n) [Arabi dopsis thalia na]
167454	ATU029 394	ATL8C4 5345:2 084..8	nap				ATL8C4 5345:2 013..8	0.75	g30803 74	59	325	4.5e- 21	(AL022 580) putati ve protei n

167455	ATU029 395	ATL8C2 3478:1 ..944	nap					ATL8C2 3478:7 5..503	0.75	g42622 11	59	891	6.0e- 63	[Arabi dopsis thalia nal] (AC006 161) hypoth etical protei n [Arabi dopsis thalia nal]
167456	ATU029 396	ATL8S1 2127:1 ..392	nap					ATL8S1 2127:9 9..311	0.74	g11500 7	59	111	4.5e- 08	DETHIO BIOTIN SYNTH TASE (DETHI OBIOTI N SYNTHA SE) (DTB SYNTH TASE) (DTBS) [Bacil lus sphaer icus]
167457	ATU029 397	ATL8C5 904:25 12..40 32	nap					ATL8C5 904:25 12..40 32	0.73	g28276 52	59	556		(AL021 637) hypoth etical protei n [Arabi dopsis thalia

167458	ATU029 398	ATL8C3 460:77 9..1	nap				ATL8C3 460:77 9..48	0.73	g46783 21	59	342	0.074	na] (AL049 658) putati ve protei n [Arabi dopsis thalia na]
167459	ATU029 399	ATL8C1 2688:2 572..1	nap				ATL8C1 2688:2 572..5 8	0.72	g72886 7	59	627	2.5e- 43	ANTER- SPECIF IC PROLIN E-RICH PROTEI N APG PRECUR SOR [Arabi dopsis thalia na]
167460	ATU029 400	ATL8C2 5997:1 ..923	nap				ATL8C2 5997:2 71..92 3	0.71	g31933 32	59	301	8.5e- 17	(AF069 299) simila r to Arabid opsis AT- hook protei n l (GB:AJ 222585) [Arabi dopsis thalia

167461	ATU029 401	ATL8S2 2106:4 97..1	nap				ATL8S2 2106:4 97..65	0.70	g38613 62	59	177	4.7e- 16	na] (AJ235 273) SINGLE - STRAND BINDIN G PROTEI N (ssb) [Ricke ttsia prowaz ekilj]
167462	ATU029 402	ATL8C7 618:69 0..1	nap				ATL8C7 618:69 0..199	0.70	g47339 60	59	459	3.2e- 37	(AC007 294) putati ve zinc- finger protei n [Arabi dopsis thalia na]
167463	ATU029 403	ATL8C2 5338:2 146..1	nap				ATL8C2 5338:2 131..1 22	0.70	g40564 90	59	1562	3.0e- 106	(AC005 896) hypoth etical protei n [Arabi dopsis thalia na]
167464	ATU029 404	ATL8S1 5679:5 35..18	nap				ATL8S1 5679:4 53..18	0.69	g11729 02	59	282	8.8e- 21	REGA PROTEI N

		5						5							[Rhodo bacter capsul atus]
167465	ATU029 405	ATL8C3 3246:1 587..1	nap					ATL8C3 3246:1 587..6 8	0.69		g44163 01	59	2347	4.2e- 181	(AF105 716) gag protei n [Zea mays]
167466	ATU029 406	ATL8C1 793:27 79..1	nap					ATL8C1 793:27 02..43 2	0.69		g45443 72, g44328 01	59, 40	1177, 545	2.8e- 150, 3.9e- 53	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]; (AC006 437) unknow n protei n [Arabi dopsis thalia na]
167467	ATU029 407	ATL8C5 859:1. .944	nap					ATL8C5 859:59 ..944	0.69		g23927 63	59	408		(AC002 534) hypoth etical protei n

167468	ATU029 408	ATL8C4 1064:7 90..1	nap					ATL8C4 1064:6 20..7	0.68	g45126 86	59	502	5.4e- 45	[Arabi dopsis thalia nal] (AC006 931) hypoth etical protei n [Arabi dopsis thalia nal]
167469	ATU029 409	ATL8C3 7785:1 578..4 50	nap					ATL8C3 7785:1 578..8 09	0.68	g22136 29	59	939	4.1e- 84	(AC000 103) F21J9. 21 [Arabi dopsis thalia nal]
167470	ATU029 410	ATL8C9 873:1. .1117	nap					ATL8C9 873:31 9..104 1	0.66	g17089 72	59	665	9.3e- 71	(R) - MANDEL ONITRI LE LYASE ISOFOR M 3 PRECUR SOR (HYDRO XYNITR ILE LYASE 3) ((R) - OXYNIT RILASE 3)

167471	ATU029 411	ATL8C1 6522:1 122..5 4	nap					ATL8C1 6522:9 65..84	0.66	g45032 77	59	82	0.0030	dCMP deamin ase [Homo sapien s]	[Prunu s seroti na]
167472	ATU029 412	ATL8S1 8969:5 91..1	nap					ATL8S1 8969:4 83..46	0.65	g11686 65	59	599	7.3e- 55	BIOTIN SYNTHA SE (BIOTI N SYNTH E TASE) [Haemo philus influe nzae Rd]	
167473	ATU029 413	ATL8C2 6251:2 691..1	nap					ATL8C2 6251:2 635..4 4	0.64	g34618 40	59	2695	2.9e- 272	(AC005 315) putati ve revers e transc riptas e [Arabi dopsis thalia na]	
167474	ATU029 414	ATL8C2 0317:1 047..1	nap					ATL8C2 0317:8 07..44 9	0.61	g47579 48	59	808	9.1e- 81	Cell divisi on cycle 23,	

167475	ATU029 415	ATL8C3 2834:2 799..1	nap					ATL8C3 2834:2 354..8 5	0.61	g44067 98	59	2947	2.4e- 272	yeast homolo g; CDC23 [Homo sapien s]
167476	ATU029 416	ATL8C4 3579:1 ..754	nap					ATL8C4 3579:2 64..75 4	0.61	g32528 16	59	1039		(AC006 304) putati ve helica se [Arabi dopsis thalia na]
167477	ATU029 417	ATL8C8 350:22 6..996	nap					ATL8C8 350:22 6..930	0.60	g45860 69	59	889	7.5e- 88	(AC004 705) hypoth etical protei n [Arabi dopsis thalia na]
167478	ATU029 418	ATL8C2 2872:1 483..2	nap					ATL8C2 2872:1 483..2	0.60	g13635 28	59	1014	1.3e- 102	(AC006 194) hypoth etical protei n [Arabi dopsis thalia na]

167479	ATU029 419	340	nap					204	0.60	g45862 58	59	589	7.9e- 65	maize [Zea mays] (AL049 640) putati ve protei n [Arabi dopsis thalia na]
167480	ATU029 420	ATL8C4 6949:7 12..1	nap					ATL8C4 6949:4 63..27 3	0.59	g46894 52	59	402	1.4e- 39	(AC006 267) putati ve transp oson protei n [Arabi dopsis thalia na]
167481	ATU029 421	ATL8C3 3294:1 ..1465	nap					ATL8C3 3294:5 2..101 3	0.57	g33675 20, g48357 95	59, 41	1012, 225	1.4e- 88, 5.4e- 20	(AC004 392) Simila r to protei n kinase APK1A, tyrosi ne- serine - threon ine kinase

167482	ATU029 422	ATL8C6 683:63 3..1	nap							0.57	g46462 26	59	1013	5.6e- 102	gb D12 522 from A. thalia na. [Arabi dopsis thalia na]; (AC007 296) F25C20 .23 [Arabi dopsis thalia na] (AC007 235) hypoth etical protei n [Arabi dopsis thalia na]
167483	ATU029 423	ATL8C2 3772:1 204..1	nap							0.56	g37023 42	59	1574	1.6e- 161	(AC005 397) hypoth etical protei n [Arabi dopsis thalia na]
167484	ATU029 424	ATL8S2 1445:5	nap							0.55	g22909 98	59	181	1.6e- 14	(AF006 000)

167485	ATU029 425	96..1	ATL8S1 3857:5 0..498	nap				36..53	0.55	g30249 03	59	148	0.0001 7	unknown [Bordetella pertussis] HYPOTHETICAL 15.4 KD PROTEIN CY71.2 4 [Mycobacterium tuberculosis]
167486	ATU029 426	ATL8C1 5987:1 ..937	nap					ATL8C1 5987:1 7..835	0.54	g45875 35	59	773	3.8e- 73	(AC006577) Belongs to the PF100657 Lipase /Acylhydrolase with GDSL-motif family . EST gb R29935 comes from

167487	ATU029 427	ATL8C2 49:182 5..1	nap					ATL8C2 49:181 3..49	0.54	946462 32	59	2280	6.1e- 235	(AC007 266) putati ve ligand -gated ion channe l protei n [Arabi dopsis thalia na]
167488	ATU029 428	ATL8C1 6583:1 195..1	nap					ATL8C1 6583:7 19..21	0.53	933954 40	59	386	5.2e- 30	(AC004 683) hypoth etical protei n [Arabi dopsis thalia na]
167489	ATU029 429	ATL8C4 7445:3 23..28 33	nap					ATL8C4 7445:3 23..28 02	0.53	936953 82	59	775	3.1e- 78	(AF096 370) contai ns simila rity to Arabid opsis

167490	ATU029 430	ATL8C1 0462:1 898..1	nap						0.52	g21905 49	59	533	1.1e- 52	thalia na retrot ranspo son Tall-1 (GB:L4 7193) [Arabi dopsis thalia na]
167491	ATU029 431	ATL8S1 6159:6 67..32 3	nap						0.52	g21209 76	59	434	6.1e- 41	acetyl transf erase homolo g - Bordet ella pertus sis [Borde tella pertus sis]
167492	ATU029 432	ATL8C2 0271:1 ..2723	nap						0.52	g33193 60	59	2370	2.6e- 217	(AF077 408) contai ns

167493	ATU029 433	ATL8S2 038:38 5..1	nap						ATL8S2 038:33 4..16	0.51	g60618 8	59	132	7.5e- 09	similarity to Vicia faba retrotransposon- like gene (GB:AB007467) [Arabidopsis thaliana] (U18997) ORF_f2 17; orfE of ECMRED , uses 2nd start [Escherichia coli]
167494	ATU029 434	ATL8C2 0720:1 166..1	nap						ATL8C2 0720:1 017..6 0	0.51	g33193 71	59	1494	2.5e- 157	(AF077409) Similar to pectinesterase; T24M8.6 [Arabidopsis thaliana]

167495	ATU029 435	ATL8C8 01:333 4..104 5	nap					ATL8C8 01:328 9..125 4	0.51	g48368 82	59	1567	1.2e- 107	dopsis thalia na] (AC007 260) lcl pr t_seq No defini tion line found [Arabi dopsis thalia na]
167496	ATU029 436	ATL8S1 3395:5 73..28	nap					ATL8S1 3395:5 10..12 3	0.49	g17890 36	59	323	7.7e- 18	(AE000 352) putati ve transp ort protei n [Esche richia coli]
167497	ATU029 437	ATL8C3 1048:1 256..1	nap					ATL8C3 1048:5 64..43	0.49	g41159 21	59	1695	6.6e- 168	(AF118 222) F3H7.4 gene produc t [Arabi dopsis thalia na]
167498	ATU029 438	ATL8C2 3330:1 36..41	nap					ATL8C2 3330:1 531..4	0.49	g39351 64	59	2603	1.5e- 266	(AC004 557) F17L21

167499	ATU029 439	ATL8C3 2953:5 87..1	nap					0.47	g46782 32	59	437	2.1e- 38	AC007 (265) hypothe- tical protein [Arabi dopsis thalia na]
167500	ATU029 440	ATL8C3 3440:3 025..3 74	nap					0.47	g47739 08, g36953 99	59, 49	1631, 964	1.4e- 124, 1.1e- 126	(AF147 259) No defini- tion line found [Arabi dopsis thalia na]; (AF096 372) contai- ns simila- rity to Arabid opsis thalia na retro- transpo- son

167501	ATU029 441	ATL8C1 1027:1 ..1240	nap					ATL8C1 1027:6 44..11 55	0.47	g45389 66	59	1846	8.5e- 188	Athila (GB:X8 1801) [Arabi dopsis thalia na]
167502	ATU029 442	ATL8C6 040:1. .1103	nap					ATL8C6 040:6. .1007	0.46	g31282 31	59	470	5.8e- 45	(AL049 488) putati ve protei n [Arabi dopsis thalia na]
167503	ATU029 443	ATL8C8 070:53 7..1	nap					ATL8C8 070:35 5..8	0.46	g38941 62	59	785	4.6e- 77	(AC004 077) hypoth etical protei n [Arabi dopsis thalia na]
167504	ATU029 444	ATL8C1 0765:2 706..3	nap					ATL8C1 0765:2 621..5	0.46	g43888 30	59	1969	3.0e- 196	(AC005 312) hypoth etical protei n [Arabi dopsis thalia na]
														(AC006 528) hypoth

167508	ATU029 448	ATL8S7 473:60 ..459	nap						ATL8S7 473:66 ..449	0.41	g11747 17	59	173	6.6e- 15	Athila (GB:X8 1801) [Arabi dopsis thalia nal; (AC006 446) hypoth etical protei n [Arabi dopsis thalia nal
167509	ATU029 449	ATL8C9 038:1. ..3214	nap						ATL8C9 038:78 ..2638	0.40	g46801 83	59	1011		(AF111 709) gag-

167510	ATU029 450	ATL8C2 8344:4 86..90	nap										g17698 99	59	307	1.5e- 25	(Y0801 0) lectin recept or kinase [Arabi dopsis thalia nal]	pol protei n [Oryza sativa subsp. indica]
167511	ATU029 451	ATL8S2 8629:6 09..1	nap										g44163 03	59	678	6.7e- 62	(AF105 716) gag protei n [Zea mays]	
167512	ATU029 452	ATL8S2 0677:1 ..256	nap										g11757 22	59	102	1.2e- 05	HYPOTH ETICAL 14 KD PROTEI N IN TRNI INTRON (ORF 134) [Zea mays]	
167513	ATU029 453	ATL8S1 0885:5 61..1	nap										g29829 98	59	150	4.2e- 15	(AE000 683) histid ine	

167514	ATU029 454	ATL8C3 2260:4 57..1	nap										g47739 12	59	590	3.0e- 33	(AF147 259) No. defini tion line found [Arabi dopsis thalia nal]	kinase sensor protei n [Aquif ex aeolic us]
167515	ATU029 455	ATL8C4 4606:4 042..3 447	nap										g38602 53	59	352	3.5e- 30	(AC005 824) hypoth etical protei n [Arabi dopsis thalia nal]	kinase sensor protei n [Arabi dopsis thalia nal]
167516	ATU029 456	ATL8C2 5443:7 11..11 61	nap										g42493 80	59	179	8.9e- 15	(AC005 966) ESTs gb Z37 637, gb AA0 42498 and gb AA0 42269 come	kinase sensor protei n [Arabi dopsis thalia nal]

167517	ATU029 457	ATL8C3 1951:1 ..1049	nap								g26424 44	59	1400	5.4e- 132	(AC002 391) putati ve cytoch rome P450 [Arabi dopsis thalia nal]
167518	ATU029 458	ATL8C2 8565:1 585..6 38	nap								g45860 36	59	1459	2.5e- 146	(AC007 109) hypoth etical protei n [Arabi dopsis thalia nal]
167519	ATU029 459	ATL8C1 4469:5 70..1	nap								g31281 74	59	436	4.6e- 45	(AC004 521) hypoth etical protei n [Arabi dopsis thalia nal]
167520	ATU029 460	ATL8C4 2827:1	nap								g15272 17	59	272	3.6e- 26	(U6821 7)

167521	ATU029 461	ATL8C8 679:1. .3623	nap										g42635 44	59	2709	4.4e- 259	ferritin [Brassic napus] (AC006 250) putative Athila retroele ment ORF1 protein [Arabid opsis thaliana]
167522	ATU029 462	ATL8S2 0249:1 ..512	nap										g27726 19	59	363	7.1e- 35	(U9335 5) hypothet ical 32.1 kDa protein [Erwinia herbicola]
167523	ATU029 463	ATL8C1 7063:2 086..9 14	nap										g32362 53	59	914	5.0e- 94	(AC004 684) receptor- like protein kinase [Arabid

167529	ATU029 469	ATL8C2 5625:5 46..1	nap										g38602 46	59	600	3.0e- 59	(AC005 824) putati ve revers e- transc riptas e protei n [Arabi dopsis thalia na]
167530	ATU029 470	ATL8C2 8787:1 ..964	nap										g28276 52	59	329	8.6e- 33	(AL021 637) hypoth etical protei n [Arabi dopsis thalia na]
167531	ATU029 471	ATL8C3 0459:1 ..184	nap										g28276 39	59	96	1.4e- 07	(AL021 636) hypoth etical protei n [Arabi dopsis thalia na]

	475	1814:5 70..1							95				44	304) hypoth etical protei n [Arabi dopsis thalia na]
167536	ATU029 476	ATL8C1 7904:2 618..3 48	nap						g28274 4	59	91			gene coxi intron 1 protei n - liverw ort (March antia polymo rpha) mitoch ondrio n [March antia polymo rpha]
167537	ATU029 477	ATL8S2 1014:1 ..300	nap						g26552 67	59	267		1.0e- 20	(AF031 161) styren e oxide isomer ase [Pseud omonas sp. VLB120]

167538	ATU029 478	ATL8C4 3964:2 663..2 550	nap							g37907 43	59	118	(AF099 919) contai ns simila rity to cytoch rome C oxidas e assemb ly protei n COX17 homolo gues [Caeno rhabdi tis elegan s]
167539	ATU029 479	ATL8S1 7311:1 ..541	nap							g21499 01	59	370	(U9470 7) unknow n [Enter ococcu s faecal is]
167540	ATU029 480	ATL8C1 005:34 2..1	nap							g45126 32	59	123	(AC004 793) Contai ns simila rity to [Arabi

167549	ATU029 489	ATL8S2 4276:6 01..1	nap										g11462 20	59	287	1.6e- 26	(L4764 8) NAD+ depend ent glycer ol-3- phosph ate dehydr ogenase [Bacillus subtilis]	proteol n, 5', partial [Arabis dopsis thaliana]
167550	ATU029 490	ATL8C3 6473:9 41..1	nap										g30333 75	59	949	8.2e- 85	(AC004 238) putative berberine bridge enzyme [Arabis dopsis thaliana]	
167551	ATU029 491	ATL8C1 4718:1 671..1	nap										g33193 45	59	1394	1.0e- 153	(AF077 407) contains	

167552	ATU029 492	ATL8C4 3275:2 598..8 11	nap							59	2457	2.2e- 255	(AC006 250) putati ve Athila retroo lement ORF1 protei n [Arabi dopsis thalia na]	simila rity to maize transp oson MuDR (GB:M7 6978) [Arabi dopsis thalia na]
167553	ATU029 493	ATL8C3 5047:2 567..1	nap							59	2070	1.2e- 144	(AF058 825) No defini tion line found [Arabi dopsis thalia na]	
167554	ATU029 494	ATL8C1 3732:1	nap							59	150	0.0047	(D8685 3)	

167555	ATU029 495	ATL8S2 5393:6 20..1	nap										g44163 03	59	298	4.8e- 25	(AF105 716) gag protei n [Zea mays]	extens in [Catha ranthu s roseus]
167556	ATU029 496	ATL8C1 9954:1 889..2 147	nap										g31281 82	59	413	2.2e- 35	(AC004 521) hypoth etical protei n [Arabi dopsis thalia na]	
167557	ATU029 497	ATL8C3 9216:1 647..1	nap										g36953 81	59	122	0.83	(AF096 370) contai ns simila rity to Arabid opsis thalia na revers e- transc riptas e-like	

167558	ATU029 498	ATL8C4 9690:1 ..1182	nap							945196 71	59	154	2.5e- 09	(AB017 693) transf actor [Nicot iana tabacu m]	protei ns [Arabi dopsis thalia na]
167559	ATU029 499	ATL8S9 846:1. .523	nap							945863 41	59	354	1.4e- 27	(AB016 787) cytoch rome o ubiqui nol oxidas e E [Pseud omonas putida]	
167560	ATU029 500	ATL8C4 1715:6 17..1	nap							947739 17	59	135	1.5e- 08	(AF147 259) No defini tion line found [Arabi dopsis thalia na]	
167561	ATU029 501	ATL8C3 6009:1 494..2	nap							945077 11	59	95	5.0e- 06	tetrat ricope ptide	

167565	ATU029 505	ATL8C2 2440:3 285..3 766	nap							g84961	59	150	1.3e- 05	[Arabi dopsis thalia na] gag protei n - fruit fly (Droso phila melano gaster) transp oson 1731 [Droso phila melano gaster]
167566	ATU029 506	ATL8C2 4218:2 668..3 140	nap							g44553 64	59	496	1.4e- 42	(AL035 524) senesc ence- associ ated protei n-like [Arabi dopsis thalia na]
167567	ATU029 507	ATL8C3 4367:1 ..1449	nap						ATL8C3 4367:5 38..14 19	0.99	58	435	6.3e- 41	(U7099 9) CCS1 [Chlam ydomon as

167572	ATU029 512	ATL8S1 0897:1 ..473	nap					ATL8S1 0897:3 ..464	0.95	g17232 94	58	252	7.6e- 23	prote n [Arabi dopsis thalia na]
167573	ATU029 513	ATL8C1 5858:1 ..1185	nap					ATL8C1 5858:2 63..11 85	0.95	g47880 9	58	758	1.8e- 75	prote n kinase 6 (EC 2.7.1. -) - soybea n [Glyci ne max]
167574	ATU029 514	ATL8C1 9268:4 64..14 89	nap					ATL8C1 9268:4 64..11 91	0.95	g18413 99	58	744	1.7e- 72	(Z3466 1) AtTFII B2 [Arabi dopsis thalia na]
167575	ATU029 515	ATL8C2 6243:1	nap					ATL8C2 6243:1	0.93	g44907 04	58	844	2.6e- 65	(AL035 680)

167576	ATU029 516	809..1	nap				575..1 1	0.92	g33288 04	58	120	0.97	(AE001 311) GTP Bindin g Protei n [Chlam ydia tracho matis]
167577	ATU029 517	ATL8C1 3794:1 791..1	nap				ATL8C6 763:10 78..24 2	0.90	g47339 81	58	1146	4.4e- 111	(AC007 268) putati ve serine carbox ypepti dase [Arabi dopsis thalia na]
167578	ATU029 518	ATL8C4 1041:1 ..901	nap				ATL8C4 1041:7 06..90 1	0.89	g18711 79	58	158	2.6e- 14	(U9043 9) FMRFam ide precu sor isolog [Arabi dopsis

167579	ATU029 519	ATL8C2 5780:4 784..2 641	nap				ATL8C2 5780:4 657..2 641	0.88	g34618 41	58	1220	2.1e- 97	thalia na] (AC005 315) putati ve recept or protei n kinase [Arabi dopsis thalia na]
167580	ATU029 520	ATL8C4 5992:2 911..8 8	nap				ATL8C4 5992:8 83..21 6	0.88	g45843 54	58	714	4.4e- 62	(AC006 420) putati ve PttA- like transp oson protei n [Arabi dopsis thalia na]
167581	ATU029 521	ATL8C4 7069:2 288..1	nap				ATL8C4 7069:2 223..3 14	0.87	g43357 20	58	2072	1.1e- 225	(AC006 248) putati ve revers e transc riptas e Tal- 1 [Arabi

167582	ATU029 522	ATL8C3 4258:2 958..9 24	nap						ATL8C3 4258:2 922..9 24	0.86	g39534 79	58	3112	8.5e- 291	(AC002 328) F2202. 24 [Arabi dopsis thalia na]
167583	ATU029 523	ATL8S2 856:1. .743	nap						ATL8S2 856:28 2..733	0.85	g23427 28	58	660	9.6e- 67	(AC002 341) Cystei ne protei nase isolog [Arabi dopsis thalia na]
167584	ATU029 524	ATL8C1 3452:5 76..1	nap						ATL8C1 3452:4 83..22 4	0.84	g44671 45	58	53	0.0001 4	(AL035 540) farnes ylated protei n (ATFP6) [Arabi dopsis thalia na]
167585	ATU029 525	ATL8C3 6029:1 783..2 568	nap						ATL8C3 6029:1 783..2 172	0.84	g72977 4	58	429	5.9e- 18	HEAT SHOCK FACTOR PROTEI N HSF30

167586	ATU029 526	ATL8C5 014:1. .1852	nap							ATL8C5 014:26 9..177 7	0.82	g34508 42	58	766	4.3e- 73	(HEAT SHOCK TRANSC RIPTIO N FACTOR 30) (HSTF 30) (HEAT STRESS TRANSC RIPTIO N FACTOR) [Lycop ersico n peruvi anum]
167587	ATU029 527	ATL8C1 8610:6 98..1	nap							ATL8C1 8610:6 98..48	0.82	g42204 70	58	613	5.1e- 61	(AC006 069) hypoth etical protei n

167588	ATU029 528	ATL8S7 922:54 4..1	nap					ATL8S7 922:47 4..57	0.80	g14016 4	58	467	3.1e- 37	[Arabi dopsis thalia na]
														HYPOTH ETICAL 34.9 KD PROTEI N IN FRUR- FTSL INTERG ENIC REGION (ORFB) [Esche richia coli]
167589	ATU029 529	ATL8S2 089:19 8..592	nap					ATL8S2 089:19 8..504	0.80	g23150 9	58	192	6.0e- 14	ACTIN DEPOLY MERIZI NG FACTOR (ADF) [Liliu m longif lorum]
167590	ATU029 530	ATL8C4 955:49 3..1	nap					ATL8C4 955:49 0..64	0.79	g44690 27	58	386	6.9e- 36	(AL035 602) foreve r young gene (FEY) [Arabi dopsis thalia na]

167591	ATU029 531	ATL8S1 0605:5 25..1	nap				ATL8S1 0605:4 49..16	0.78	g36463 69	58	733	2.7e- 72	(AJ007 825) Mext protei n [Pseud omonas aerugi nosa]
167592	ATU029 532	ATL8C2 1820:5 1..172 6	nap				ATL8C2 1820:5 1..155 8	0.78	g46801 80	58	1210	2.6e- 109	(AF111 709) polypr oteine [Oryza sativa subsp. indica]
167593	ATU029 533	ATL8C4 8514:4 053..9	nap				ATL8C4 8514:4 053..9	0.75	g47739 08	58	1788	3.9e- 155	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
167594	ATU029 534	ATL8C3 6196:7 00..1	nap				ATL8C3 6196:6 91..16 6	0.73	g38734 08	58	229	1.2e- 18	(L7692 6) putati ve zinc finger protei n [Arabi dopsis thalia

167595	ATU029 535	ATL8C1 1063:1 ..1574	nap				ATL8C1 1063:1 11..12 09	0.72	g80629 9	58	1588	3.1e- 161	na] (M2542 7) unknown n protei n [Zea mays]
167596	ATU029 536	ATL8C4 5988:5 60..1	nap				ATL8C4 5988:5 60..12	0.72	g42204 77	58	321	6.8e- 27	(AC006 069) unknown n protei n [Arabi dopsis thalia na]
167597	ATU029 537	ATL8C4 8437:6 7..410 8	nap				ATL8C4 8437:6 7..410 8	0.71	g11725 46	58	562	3.0e- 46	POLYRI BONUCL EOTIDE NUCLEO TIDYLT RANSFE RASE (POLYN UCLEOT IDE PHOSPH ORYLAS E) (PNPAS E) [Haemo philus influe nzae Rd]
167598	ATU029	ATL8C1	nap				ATL8C1	0.71	g47552	58	489	9.5e-	(AC007

538	5980:9 3..674						5980:9 3..611	03					44	018) hypoth etical protei n [Arabi dopsis thalia nal]
167599	ATU029 539	ATL8S1 2555:9 6..524	nap				ATL8S1 2555:1 11..44 2	0.70			58	444	5.3e- 42	30S RIBOSO MAL PROTEI N S2 (BS1) (VEGET ATIVE PROTEI N 209) (VEG20 9) [Bacil lus subtil is]
167600	ATU029 540	ATL8C1 8364:1 ..932	nap				ATL8C1 8364:2 15..92 8	0.70			58	658	2.4e- 53	(AC006 264) unknow n protei n [Arabi dopsis thalia nal]
167601	ATU029 541	ATL8C4 8219:8 8..195 8	nap				ATL8C4 8219:8 8..195 8	0.70			58	99	9.4e- 07	TETRAA CYLIDIS ACCHAR IDE 4'-

167602	ATU029 542	ATL8S1 3860:5 49..20	nap						ATL8S1 3860:5 31..24	0.70	g11104 41	58	210	6.4e- 20	KINASE (LIPID A 4'- KINASE) [Haemo philus influe nzae Rd]
167603	ATU029 543	ATL8S1 2989:1 ..422	nap						ATL8S1 2989:2 32..42 2	0.70	g32041 32	58	98	0.87	(M8062 8) hypoth etical produc t [Strep tomyce s griseu s]
167604	ATU029 544	ATL8S2 7172:1 54..50 5	nap						ATL8S2 7172:1 54..41 2	0.69	g23221 7	58	131	1.6e- 11	(AJ006 770) extens in [Cicer arieti num]
															GLUTAT HIONE S- TRANSF ERASE GST- 6.0 (GST B1-1) [Prote us mirabi

167609	ATU029 549	ATL8C4 9452:2 298..3 877	nap				ATL8C4 9452:2 298..3 828	0.65		g43098 68, g47739 10	58, 36	1348, 192	8.8e- 131, 5.7e- 14	na] (AC006 527) putati ve retrot ranspo son- like orf [Arabi dopsis thalia na]; (AF147 259) No defini tion line found [Arabi dopsis thalia na]
167610	ATU029 550	ATL8C8 922:30 25..18 4	nap				ATL8C8 922:14 72..18 4	0.65		g30045 50	58	395	3.4e- 26	(AC003 673) hypoth etical protei n [Arabi dopsis thalia na]
167611	ATU029 551	ATL8C3 6137:1 500..1	nap				ATL8C3 6137:1 500..9 1	0.64		g44552 92	58	1539	2.4e- 124	(AL035 528) putati ve protei

167612	ATU029 552	ATL8C4 6970:1 898..4 22	nap					ATL8C4 6970:8 85..76 0	0.64	g42638 19	58	361	1.4e- 20	n [Arabi dopsis thalia na] (AC006 067) putati ve serpin protei n [Arabi dopsis thalia na]
167613	ATU029 553	ATL8C3 0180:9 86..39	nap					ATL8C3 0180:8 43..39	0.63	g33416 86	58	862	1.4e- 45	(AC003 672) putati ve glycos yl transf erase [Arabi dopsis thalia na]
167614	ATU029 554	ATL8C2 2448:4 046..2 428	nap					ATL8C2 2448:3 807..2 592	0.62	g33778 16	58	1860	8.5e- 140	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot

167615	ATU029 555	ATL8C2 0795:1 ..1137	nap						ATL8C2 0795:1 43..90 5	0.61	g31579 50	58	1083	7.4e- 86	(AC002 131) Contai ns simila rity to hypothe tical protei n C18b11 .05 gb Z50 728 from S. pombe. EST gb H76 601 comes from this gene. [Arabi dopsis thalia na]
167616	ATU029 556	ATL8C2 9916:5	nap						ATL8C2 9916:5	0.59	g47739 17	58	709	1.0e- 57	(AF147 259)

167617	ATU029 557	ATL8C3 3455:1 806..1	nap				89..26	0.59	g12795 96	58	111	1.8e- 10	No defini tion line found [Arabi dopsis thalia nal] (Z7175 1) pectin methyl esterase [Nicot iana plumba ginifolia]
167618	ATU029 558	ATL8S2 1239:4 7..492	nap				ATL8S2 1239:4 7..475	0.58	g21456 45	58	222	1.3e- 15	B1177 F3_136 protei n - Mycoba cteriu m leprae [Mycob acteri um leprae]
167619	ATU029 559	ATL8C2 6517:1 ..2680	nap				ATL8C2 6517:6 97..25 95	0.58	g31932 91	58	1990	2.0e- 207	(AF069 298) Simila r to DNA mismat ch

167620	ATU029 560	ATL8C3 0427:1 ..1496	nap					ATL8C3 0427:1 25..12 90	0.56	g47739 08	58	2224	2.8e- 193	repair protei n; T14P8. 6 [Arabi dopsis thalia na]
167621	ATU029 561	ATL8C9 495:14 04..1	nap					ATL8C9 495:14 04..56	0.56	g42204 56	58	569	1.4e- 42	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
167622	ATU029 562	ATL8S2 2070:6 13..32	nap					ATL8S2 2070:5 46..32	0.55	g11683 7	58	264	6.6e- 15	(AC006 216) Strong simila rity to [Arabi dopsis thalia na]
167623	ATU029 563	ATL8C1 5695:1	nap					ATL8C1 5695:1	0.55	g45444 55	58	156	1.7e- 10	COBF PROTEI N [Pseud omonas denitr ifican s]
														(AC006 592)

167624	ATU029 564	789..5 18	nap					719..5 18	0.54	g45052 35	58	362	1.0e- 35	hypothetical protein [Arabidopsis thaliana]
167625	ATU029 565	ATL8C9 373:1. .1598	nap					ATL8C9 373:41 2..155 1	0.53	g54964 1, g23846 93	58, 37	152, 110	0.0007 4, 0.0005 9	mannose phosphate isomerase [Homo sapiens]
		ATL8C2 3552:1 064..1	nap					ATL8C2 3552:2 38..19						HYPOTHETICAL 35.8 KD PROTEIN IN PRP16-SRP40 INTERGENIC REGION [Saccharomyces cerevisiae]; (AF013216) unknown [Myxococcus xanthus]

167626	ATU029 566	ATL8C2 2501:1 ..1354	nap				ATL8C2 2501:1 22..11 35	0.51	g42635 22	58	1053	1.6e- 106	(AC004 044) hypoth etical protei n [Arabi dopsis thalia na]
167627	ATU029 567	ATL8C2 6567:1 ..212	nap				ATL8C2 6567:5 3..212	0.50	g46783 83	58	291	2.1e- 24	(AL049 656) histon e H2A.F/ Z-like protei n [Arabi dopsis thalia na]
167628	ATU029 568	ATL8C1 4192:1 134..1	nap				ATL8C1 4192:1 009..4 3	0.50	g45389 41	58	1423	1.0e- 147	(AL049 483) NPR1 like protei n [Arabi dopsis thalia na]
167629	ATU029 569	ATL8S2 7984:1 ..522	nap				ATL8S2 7984:4 67..22 5	0.50	g21209 87	58	267	2.6e- 14	BrkB - Bordet ella pertus sis [Borde tella

167630	ATU029 570	ATL8C4 2272:1 ..3731	nap				ATL8C4 2272:1 034..3 483	0.47	g42635 44	58	2416	3.4e- 240	pertus sis] (AC006 250) putati ve Athila retroe lement ORF1 protei n [Arabi dopsis thalia na]
167631	ATU029 571	ATL8S1 8718:1 ..701	nap				ATL8S1 8718:9 2..653	0.47	g16539 48	58	353	8.1e- 28	(D9091 7) hypoth etical protei n [Synec hocyst is sp.]
167632	ATU029 572	ATL8C1 3567:5 382..7 903	nap				ATL8C1 3567:7 216..6 847	0.47	g47739 10	58	88	0.015	(AF147 259) No defini tion line found [Arabi dopsis thalia na]
167633	ATU029 573	ATL8C2 0711:5 440..1	nap				ATL8C2 0711:2 819..1	0.47	g48369 30	58	3012	8.5e- 291	(AC006 085) Hypoth

167634	ATU029 574	ATL8C3 0767:1 577..1	nap					710	0.46	g32287 1	58	777	3.0e- 79	hypoth etical protei n 1 - maize transp oson En-1 [Zea mays]
167635	ATU029 575	ATL8C3 768:1. .2291	nap					ATL8C3 768:16 7..219 7	0.45	g42063 06	58	3452	1.8e- 293	(AF049 110) prpol [Zea mays]
167636	ATU029 576	ATL8C2 9713:1 ..1010	nap					ATL8C2 9713:9 7..922	0.43	g41853 10	58	1540	2.2e- 135	(AF090 446) gag protei n [Zea mays]
167637	ATU029 577	ATL8C7 824:12 74..45 8	nap					ATL8C7 824:12 26..10 20	0.42	g24974 92	58	190	2.3e- 11	URIDYL ATE KINASE (UK) (URIDI NE MONOPH OSPHAT E KINASE) (UMP

167638	ATU029 578	ATL8C4 5702:1 ..1260	nap						ATL8C4 5702:9 5..980	0.41	g34618 27	58	250	1.7e- 24	KINASE) [Synec hocyst is sp.] (AC004 138) putati ve diseas e resist ance protei n [Arabi dopsis thalia na]
167639	ATU029 579	ATL8C4 5241:7 6..860	nap						ATL8C4 5241:3 91..75 1	0.41	g14028 83	58	307	2.5e- 26	(X9813 0) unknow n [Arabi dopsis thalia na]
167640	ATU029 580	ATL8C6 655:1. .674	nap								g35229 49	58	775	2.6e- 74	(AC004 411) hypoeth etical protei n [Arabi dopsis thalia na]
167641	ATU029 581	ATL8S1 7768:4	nap								g38606 32	58	499	3.3e- 49	(AJ235 270)

167642	ATU029 582	ATL8C3 086:11 86..1	nap							ATL8C3 086:10 28..22	1.00	g21601 41	57	1126	5.4e- 118	(AC000 375) Strong simila rity to Tritic um aestiv um serpin (gb Z4 9890). [Arabi dopsis thalia na]
167643	ATU029 583	ATL8S2 5210:5 48..1	nap							ATL8S2 5210:4 62..40	1.00	g24974 14	57	335	2.1e- 26	INTEGR ASE/RE COMBIN ASE XERD [Salmo nella typhim urium]

167644	ATU029 584	ATL8S2 2063:1 ..484	nap							g10734 48	58	140	9.7e- 11	hypothetical protein f285 - Escherichia coli [Escherichia coli]
167645	ATU029 585	ATL8C3 7989:8 73..1	nap							g31641 32	58	888	5.7e- 72	(D78601) cytochrome P450 monooxygenase [Arabidopsis thaliana]
167646	ATU029 586	ATL8S2 6588:5 17..30	nap							g44903 01	58	533		(AL035678) hypothetical protein [Arabidopsis thaliana]
167647	ATU029 587	ATL8C4 3029:7 09..1	nap							g45858 84	58	462	2.3e- 41	(AC005850) Hypothetical protein [Arabidopsis thaliana]

167651	ATU029 591	ATL8C4 3886:1 ..906	nap				ATL8C4 3886:4 4..906	1.00		g45875 27	57	1354		na] (AC007 060) Strong simila rity to F19I3. 2 []
167652	ATU029 592	ATL8C3 0793:6 077..4 174	nap							g42635 43	58	1353	7.4e- 134	(AC006 250) putati ve Athila retroe lement ORF1 protei n [Arabi dopsis thalia na]
167653	ATU029 593	ATL8C4 4305:1 077..5 78	nap							g47340 12	58	170	2.4e- 14	(AC007 112) hypo thetical protei n [Arabi dopsis thalia na]
167654	ATU029 594	ATL8C3 664:1. .1996	nap							g44172 97	58	1429	8.3e- 157	(AC007 019) hypo thetical protei n [Arabi

167655	ATU029 595	ATL8C4 6101:3 804..1 965	nap											g26513 12	58		256	5.7e- 21	dopsis thalia nal (AC002 336) hypo- thetical protein [Arabi dopsis thalia nal]
167656	ATU029 596	ATL8S3 855:39 1..1	nap											g28322 45	58		560	8.6e- 35	dopsis thalia nal (AF031 569) hypo- thetical protein [Zea mays]
167657	ATU029 597	ATL8C1 9838:1 413..1	nap											g43253 51	58		2273	7.4e- 235	dopsis thalia nal (AF128 394) similar to Antirrh- inum majus (garde- n snapdr- agon) TNP2 protein (GB:X5 7297) [Arabi dopsis thalia nal]

167662	ATU029 602	ATL8C7 892:1. .1726	nap									g45899 62	58	557	2.0e- 54	prote in [Arabi dopsis thalia na]
167663	ATU029 603	ATL8C1 227:35 3..1	nap									g21941 33	58	245	4.6e- 22	(AC007 169) putati ve fructo kinase [Arabi dopsis thalia na]
167664	ATU029 604	ATL8C1 6915:1 237..1	nap									g45859 17	58	180	1.5e- 12	(AC002 062) No defini tion line found [Arabi dopsis thalia na]
167665	ATU029 605	ATL8C3 8316:7 43..99	nap									g26187 27	58	402	1.8e- 39	(AC006 298) hypo thetical protei n [Arabi dopsis thalia na]
																(U4907 5) IAA19

167682	ATU029 622	ATL8C2 1414:1 ..733	nap								g37859 73	58	417	1.0e- 40	(AC005 560) putati ve homeob ox protei n [Arabi dopsis thalia na]	io vulgar is vulgar is]
167683	ATU029 623	ATL8S1 9625:4 11..1	nap								g31768 83	58	216	2.2e- 18	(AF065 159) RNase III [Brady rhizob ium japoni cum]	
167684	ATU029 624	ATL8C4 5048:1 539..1 330	nap								g30803 59	58	159	3.6e- 11	(AL022 580) hypoth etical protei n [Arabi dopsis thalia na]	
167685	ATU029 625	ATL8S6 454:1. .474	nap								g13286 3	58	224		CHLORO PLAST 50S RIBOSO	

167686	ATU029 626	ATL8C2 3791:1 597..1	nap										g26186 92	58	692	2.4e- 74	(AC002 510) putati ve zinc- finger protei n [Arabi dopsis thalia na]	MAL PROTEI N L2 [Sinap is alba]
167687	ATU029 627	ATL8S2 0543:4 85..1	nap								ATL8S2 0543:4 34..17	1.00	g34174 46	57	392	6.1e- 37	(AB010 087) riboso mal protei n S2 [Pseud omonas aerugi nosa]	
167688	ATU029 628	ATL8C4 1688:3 98..12 4	nap										g17811 03	58	225	4.4e- 18	(Z8386 4) menG [Mycob acteri um tuberc ulosis]	
167689	ATU029 629	ATL8C4 9065:1 ..545	nap										g41159 16	58	318	9.0e- 26	(AF118 222) F3H7.9	

167690	ATU029 630	ATL8C6 510:24 35..26 53	nap									g38927 06	58	324	6.8e- 31	(AL033 545) hypoth etical protei n [Arabi dopsis thalia na]
167691	ATU029 631	ATL8C9 08:1.. 755	nap									g48862 82	58	1129	3.4e- 104	(AL050 300) putati ve protei n [Arabi dopsis thalia na]
167692	ATU029 632	ATL8C2 7958:5 58..1	nap									g46782 07	58	623	(AC007 134) putati ve revers e transc riptas e [Arabi dopsis thalia na]	

167693	ATU029 633	ATL8C2 8922:1 ..1140	nap						g49143 73	58	371	4.3e- 31	(AC007 584) putative protein kinase [Arabi dopsis thalia na]
167694	ATU029 634	ATL8S1 5285:4 75..1	nap						g48039 33	58	235	2.1e- 22	(AC006 264) putative disease resistance response protein [Arabi dopsis thalia na]
167695	ATU029 635	ATL8S2 7669:3 42..48 2	nap						g10016 99	58	119	7.5e- 07	(D6400 2) hypothetical protein [Synec hocystis sp.]
167696	ATU029 636	ATL8C4 3114:1 ..1154	nap						g17698 98	58	653	1.4e- 67	(Y0801 0) lectin

167697	ATU029 637	ATL8C3 7014:8 49..1	nap								g47387 4	58	134	(U0828 5) a membra ne- associ ated salt- induci ble protei n [Nicot iana tabacu m]	recept or kinase [Arabi dopsis thalia na]
167698	ATU029 638	ATL8C4 9269:1 190..1	nap								g33273 95	58	410	(AC004 483) hypoth etical protei n [Arabi dopsis thalia na]	
167699	ATU029 639	ATL8S1 2294:5 76..1	nap								g26190 19	58	291	(AF027 868) putati ve transp orter [Bacil lus]	

167700	ATU029 640	ATL8S2 7115:1 ..308	nap									g45586 75	58		118	2.2e- 08	subtil is] (AC006 586) hypoth etical protei n [Arabi dopsis thalia na]
167701	ATU029 641	ATL8C6 48:129 9..1	nap									g48862 86	58		190	5.0e- 15	(AL050 300) putati ve protei n [Arabi dopsis thalia na]
167702	ATU029 642	ATL8C2 0:1..1 151	nap									g48742 73	58		837	2.7e- 81	(AC007 354) Simila r to []
167703	ATU029 643	ATL8S2 0375:5 74..1	nap									g17941 92, g11701 32	58, 45		141, 161	9.9e- 15, 6.8e- 14	(U8668 9) exuT [Erwin ia chrysa nthemi l]; PROBAB LE GLUCAR ATE TRANSP

167704	ATU029 644	ATL8C1 4816:1 ..501	nap						ATL8C1 4816:1 69..50 1	0.99		g45586 87	57	619	1.0e- 42	ORTER [Bacil lus subtil is] (AC006 586) hypoth etical protei n [Arabi dopsis thalia na]
167705	ATU029 645	ATL8C3 0904:1 ..426	nap						ATL8C3 0904:7 9..426	0.99		g10728 66	57	350	3.0e- 31	short- chain alcohol dehydr ogenase homolo g socA1 - Myxoco ccus xanthu s []
167706 ;	ATU029 646	ATL8C4 2956:8 42..1	nap						ATL8C4 2956:6 52..20 2	0.99		g42635 48	57	766	3.7e- 63	(AC006 250) putati ve En/Spm transp oson protei n (mosai

167707	ATU029 647	ATL8S1 1058:1 ..530	nap					ATL8S1 1058:1 ..515	0.99	g28942 38	57	270	3.7e- 18	(AL021 841) sigJ [Mycob acteri um tuberc ulosis]	C protei n) [Arabi dopsis thalia na]
167708	ATU029 648	ATL8C8 420:17 80..31 98	nap					ATL8C8 420:22 99..31 55	0.97	g33954 35	57	375	1.3e- 20	(AC004 683) myosin heavy chain- like protei n [Arabi dopsis thalia na]	
167709	ATU029 649	ATL8C1 0207:1 428..3 096	nap					ATL8C1 0207:1 450..2 891	0.97	g45672 65	57	658		(AC006 841) putati ve kinesi n protei n [Arabi dopsis thalia na]	

167710	ATU029 650	ATL8S6 698:1. .448	nap				ATL8S6 698:82 ..432	0.96	g26879 42	57	263	(AE001 119) hemoly sin (tlyC) [Borre lia burgdo rferil]
167711	ATU029 651	ATL8C9 167:1. .1719	nap				ATL8C9 167:12 3..169 8	0.96	g34829 20	57	1360	(AC003 970) Hypoth etical protei n [Arabi dopsis thalia nal]
167712	ATU029 652	ATL8C1 4761:2 392..3 704	nap				ATL8C1 4761:3 492..2 415	0.93	g45858 82, g26513 16	57, 35	442, 40	(AC005 850) PSI type III chloro phyll a/b- bindin g protei n [Arabi dopsis thalia nal]; (AC002 336) unknow n protei

167713	ATU029 653	ATL8S1 4103:4 53..15 6	nap						0.93		g22752 00	57	293	7.0e- 24	n [Arabi dopsis thalia na]
									ATL8S1 4103:3 34..22 6						(AC002 337) polyri bonucl eotide phosph orylas e isolog [Arabi dopsis thalia na]
167714	ATU029 654	ATL8S2 2946:1 08..57 2	nap						0.93		g23987 76	57	148	3.3e- 12	(X9962 2) putati ve regula tor of catech ol degrad ative operon [Rhodo coccus opacus]
									ATL8S2 2946:1 08..56 3						
167715	ATU029 655	ATL8C4 2903:1 ..1448	nap						0.93		g45812 07	57	1428	3.3e- 120	(Y1791 4) cyclic nucleo tide and calmod
									ATL8C4 2903:4 14..14 45						

167716	ATU029 656	ATL8C2 3481:6 24..1	nap					ATL8C2 3481:1 70..26	0.93	g22449 60	57	608	1.2e- 55	ulin- regula ted ion channe l [Arabi dopsis thalia na]
167717	ATU029 657	ATL8S3 943:57 5..1	nap					ATL8S3 943:42 3..27	0.93	g16575 38	57	55	0.28	(Z9734 0) simila rity to copia- like retrot ranspo son [Arabi dopsis thalia na]
167718	ATU029 658	ATL8C2 2385:1 224..1	nap					ATL8C2 2385:1 224..4 0	0.92	g44551 99	57	268	9.2e- 16	(U7385 7) galact oside O- acetyl transf erase [Esche richia coli] (AL035 440) putati ve protei

167719	ATU029 659	ATL8C3 4883:8 51..17 99	nap					ATL8C3 4883:8 51..16 90	0.92	g41543 52	57	257	9.0e- 28	n [Arabi dopsis thalia na]
167720	ATU029 660	ATL8C2 6934:2 350..7 76	nap					ATL8C2 6934:2 255..7 90	0.92	g23350 97	57	603	9.1e- 60	(AC002 339) putati ve recept or- like protei n kinase [Arabi dopsis thalia na]
167721	ATU029 661	ATL8S1 3672:4 24..1	nap					ATL8S1 3672:4 24..50	0.92	g36473 31	57	79	9.7e- 07	(AL031 644) putati ve secret ory protei n [Schiz osacch aromyc es pombel]
167722	ATU029 662	ATL8C4 7126:1	nap					ATL8C4 7126:1	0.91	g36881 86	57	482	5.4e- 45	(AL031 804)

167723	ATU029 663	..1502						35..13 44	0.90	g42635 45	57	935	2.6e- 80	putati ve protei n [Arabi dopsis thalia na] (AC006 250) putati ve Athila retroe lement ORF1 protei n [Arabi dopsis thalia na]
167724	ATU029 664	ATL8C3 0948:1 374..2 468	nap					ATL8C2 9710:1 194..6 05	0.90	g19463 60	57	422	2.3e- 41	(U9321 5) elicit or respon se elemen t bindin g protei n WRKY3 isolog [Arabi dopsis thalia na]

167725	ATU029 665	ATL8C1 6437:1 ..983	nap			ATL8C1 6437:1 88..94 2	0.89	g36953 77	57	791	7.7e- 76	(AF096 370) contai ns simila rity to NAM (no apical merist em) - like protei ns [Arabi dopsis thalia na]
167726	ATU029 666	ATL8C1 745:1. .2361	nap			ATL8C1 745:15 1..235 5	0.87	g39140 07	57	1797	4.4e- 189	MITOCH ONDRIA L LON PROTEA SE HOMOLO G 2 PRECUR SOR [Arabi dopsis thalia na]
167727	ATU029 667	ATL8C1 4072:1 ..3248	nap			ATL8C1 4072:4 0..324 8	0.87	g31526 13	57	854	2.5e- 86	(AC004 482) hypoth etical protei n [Arabi dopsis thalia

167728	ATU029 668	ATL8C1 4213:9 19..1	nap				ATL8C1 4213:9 19..19 4	0.87	g33416 86	57	982	1.5e- 88	na] (AC003 672) putati ve glycos yl transf erase [Arabi dopsis thalia na]
167729	ATU029 669	ATL8C6 535:1. .1145	nap				ATL8C6 535:53 6..114 5	0.87	g31932 97	57	869	3.7e- 90	(AF069 298) simila r to epoxid e hydrol ases [Arabi dopsis thalia na]
167730	ATU029 670	ATL8C4 8335:7 189..6 733	nap				ATL8C4 8335:7 119..6 733	0.86	g37860 01	57	466	6.5e- 45	(AC005 499) unknow n protei n [Arabi dopsis thalia na]
167731	ATU029 671	ATL8C4 861:12 3..128 2	nap				ATL8C4 861:12 3..691	0.86	g47739 10	57	109	3.7e- 05	(AF147 259) No defini tion

167732	ATU029 672	ATL8C2 6270:1 481..1 19	nap					ATL8C2 6270:1 386..1 93	0.86	g30154 88	57	594	2.4e- 65	line found [Arabi dopsis thalia na] (U5847 4) recept or- like protei n kinase [Lycop ersico n escule ntum]
167733	ATU029 673	ATL8C3 703:26 37..61 5	nap					ATL8C3 703:26 37..61 6	0.86	g31352 51	57	1298	2.8e- 143	(AC003 058) putati ve recept or protei n kinase [Arabi dopsis thalia na]
167734	ATU029 674	ATL8C4 4555:1 958..1	nap					ATL8C4 4555:1 693..2 33	0.86	g22447 92	57	947	2.9e- 92	(Z9733 6) ankyri n homolo g [Arabi dopsis

167735	ATU029 675	ATL8C2 0902:1 733..1 380	nap					ATL8C2 0902:1 639..1 380	0.86	g31842 87	57	566	1.5e- 57	thalia na] (AC004 136) revers e- transc riptas e-like protei n [Arabi dopsis thalia na]
167736	ATU029 676	ATL8C1 0278:1 ..3226	nap					ATL8C1 0278:1 57..32 26	0.86	g10016 49	57	551	4.8e- 42	(D6400 2) DNA gyrase A subuni t [Synec hocyst is sp.]
167737	ATU029 677	ATL8C4 5208:4 100..1 430	nap					ATL8C4 5208:4 025..1 430	0.84	g46783 46	57	1724	1.0e- 152	(AL049 659) putati ve protei n [Arabi dopsis thalia na]
167738	ATU029 678	ATL8C3 4895:1 ..544	nap					ATL8C3 4895:1 3..525	0.84	g37215 45	57	98	4.4e- 10	(AB006 206) ORF4 [Strep tomyce

167739	ATU029 679	ATL8C4 5989:1 ..845	nap					ATL8C4 5989:2 54..82 3	0.83	g36436 10	57	697	5.7e- 56	s griseu s] (AC005 395) putati ve serine /threo nine protei n kinase [Arabi dopsis thalia na]
167740	ATU029 680	ATL8S1 4759:1 ..605	nap					ATL8S1 4759:5 45..11 5	0.83	g44163 03	57	584	1.2e- 36	(AF105 716) gag protei n [Zea mays]
167741	ATU029 681	ATL8C3 8881:2 44..87 8	nap					ATL8C3 8881:2 44..79 0	0.83	g29822 72	57	178	1.3e- 13	(AF051 220) hypoth etical protei n [Picea marian a]
167742	ATU029 682	ATL8S2 5952:5 45..1	nap					ATL8S2 5952:5 35..43	0.82	g10735 49	57	241	1.7e- 19	livh protei n - Escher ichia coli [Esche

167743	ATU029 683	ATL8C1 9687:1 ..1777	nap				ATL8C1 9687:3 45..17 70	0.82	g39157 37	57	659	5.2e- 56	richia coli]
167744	ATU029 684	ATL8C7 505:15 12..55 1	nap				ATL8C7 505:13 05..62 9	0.80	g35488 08	57	656	2.5e- 64	(AC005 313) unknown protein [Arabis dopshis thaliana na]
167745	ATU029 685	ATL8C1 0227:2 520..3 234	nap				ATL8C1 0227:2 520..3 197	0.80	g47536 60	57	1178	1.1e- 107	(AL049 751) putative protein [Arabis dopshis thaliana na]
167746	ATU029	ATL8C4	nap				ATL8C4	0.80	g17116	57	497		PROBAB

	686	3388:1 305..1 23					3388:5 88..12 3	44					LE ASPAR GINYL- TRNA SYNTHE TASE (ASPAR AGINE- -TRNA LIGASE) (ASNRS) [Synec hocyst is sp.]
167747	ATU029 687	ATL8C3 4473:1 ..3511	nap				ATL8C3 4473:2 006..3 238	0.80	g30687 14, g45811 10	57, 37	855, 1045	7.9e- 86, 2.7e- 100	(AF049 236) unknown [Arabi dopsis thalia nal]; (AC005 825) putati ve retrot ranspo son polypr otein [Arabi dopsis thalia nal]
167748	ATU029 688	ATL8S1 0619:5	nap				ATL8S1 0619:3	0.79	g20625 64	57	245	1.8e- 21	(U8504 1)

167750	ATU029 690	ATL8C9 325:1. .3133	nap						ATL8C9 325:15 5..176 8	0.76	g45389 01	57	2877	4.2e- 269	[Mycob acteri um leprae] (AL049 482) RNA- direct ed DNA polyme rase- like protei n [Arabi dopsis thalia na]
167751	ATU029 691	ATL8C4 5490:1 292..5 77	nap						ATL8C4 5490:1 228..1 011	0.76	g45858 77	57	1076	8.4e- 67	(AC005 850) Hypoth etical protei n [Arabi dopsis thalia na]
167752	ATU029 692	ATL8C3 729:1. .1502	nap						ATL8C3 729:77 5..142 1	0.76	g48742 90	57	914	8.9e- 72	(AC007 212) putati ve purple acid phosph atase [Arabi dopsis thalia

167753	ATU029 693	ATL8C4 77:261 ..1414	nap				ATL8C4 77:482 ..1286	0.75	g39280 84	57	896	3.8e- 97	na] (AC005 770) retrot ranspo son- like protei n [Arabi dopsis thalia na]
167754	ATU029 694	ATL8C1 7812:2 088..2 97	nap				ATL8C1 7812:1 841..2 97	0.73	g47739 01	57	1606		(AF074 021) putati ve recept or- like protei n kinase [Arabi dopsis thalia na]
167755	ATU029 695	ATL8C6 233:92 8..1	nap				ATL8C6 233:92 8..303	0.72	g27379 73	57	699	1.0e- 49	(U8362 5) protei n kinase ZmMEK1 [Zea mays]
167756	ATU029 696	ATL8C5 793:1. .1292	nap				ATL8C5 793:19 3..501	0.72	g41853 11	57	1254		(AF090 446) polypr oteins [Zea]

167757	ATU029 697	ATL8C1 9860:1 ..2721	nap				ATL8C1 9860:5 5..266 4	0.71	g21092 75	57	3118	6.9e- 296	mays] (U9710 6) downy mildew resist ance protei n RPP5 [Arabi dopsis thalia na]
167758	ATU029 698	ATL8C3 3220:1 ..1368	nap				ATL8C3 3220:4 70..93 1	0.70	g33778 16	57	435	3.6e- 44	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
167759	ATU029 699	ATL8C1 902:1. .1556	nap				ATL8C1 902:51 8..103 0	0.70	g45860 66	57	984	1.5e- 118	(AC006 194) putati ve pol ypr otein,

167760	ATU029 700	ATL8S3 0100:1 ..515	nap					ATL8S3 0100:2 93..36	0.70	g29062 36	57	71	1.6e- 06	(AF047 527) activa tor protei n [Pseud omonas fluore scens]	3' partia l [Arabi dopsis thalia na]
167761	ATU029 701	ATL8C1 1899:1 480..1	nap					ATL8C1 1899:1 382..6 0	0.68	g45393 94	57	647	5.2e- 62	(AL035 526) putati ve protei n [Arabi dopsis thalia na]	
167762	ATU029 702	ATL8S1 1716:1 ..493	nap					ATL8S1 1716:4 7..297	0.68	g40068 95	57	498	1.6e- 21	(Z9970 8) putati ve protei n [Arabi dopsis thalia na]	
167763	ATU029 703	ATL8C4 1151:1 ..685	nap					ATL8C4 1151:6 81..26	0.66	g28945 99	57	485	1.3e- 51	(AL021 889) putati	

167764	ATU029 704	ATL8S5 309:1. .558	nap							7	ATL8S5 309:25 ..533	0.66	g54870 6	57	265	2.1e- 20	ve protei n [Arabi dopsis thalia na]
167765	ATU029 705	ATL8S1 2434:6 33..1	nap								ATL8S1 2434:5 67..15 3	0.66	g30470 75	57	305	5.2e- 33	(AF058 914) contai ns simila rity to SRF- type transc riptio n factor s DNA- bindin g and dimeri zation domain s (PFam:

167766	ATU029 706	ATL8C2 2988:1 931..2 03	nap						ATL8C2 2988:1 774..2 23	0.65	g42635 43	57	2332	4.0e- 240	(AC006 250) putati ve Athila retro ement ORF1 protei n [Arabi dopsis thalia na]
167767	ATU029 707	ATL8C7 793:10 03..48 0	nap						ATL8C7 793:93 6..779	0.64	g36418 70	57	133	2.8e- 09	(AJ011 013) hypoth etical protei n [Cicer arieti num]
167768	ATU029 708	ATL8C2 6838:1 620..1	nap						ATL8C2 6838:1 228..2 59	0.64	g36081 28, g28299 10	57, 48	65, 424	0.019, 2.7e- 51	(AC005 314) hypoth etical protei n [Arabi

167771	ATU029 711	ATL8C3 3244:2 995..1	nap			ATL8C3 3244:1 687..7 47	0.60	g30470 86	57	1797	3.8e- 184	(AF058 914) simila r to revers e transc riptas e (Pfam: transc ript f act.hm m, score: 72.31) [Arabi dopsis thalia na]
167772	ATU029 712	ATL8C3 7746:7 36..31 5	nap			ATL8C3 7746:6 94..58 7	0.59	g17433 88	57	110	9.9e- 06	(Y0987 4) pSbaNS 5 protei n [Sorgh um bicolo r]
167773	ATU029 713	ATL8C1 5614:6 7..761	nap			ATL8C1 5614:1 47..20 7, ATL8C1 5614:5 83..47 4	0.58, 0.89	g26233 06	57	211	5.3e- 21	(AC002 409) unknow n protei n [Arabi dopsis thalia na]

167774	ATU029 714	ATL8C1 4425:4 744..1	nap			ATL8C1 4425:4 358..2 4	0.58	g45443 72	57	1693	1.1e- 151	(AC006 920) putati ve revers e transc riptas e [Arabi dopsis thalia na]
167775	ATU029 715	ATL8C4 3951:2 916..9 39	nap			ATL8C4 3951:2 366..9 39	0.58	g33193 60	57	1618		(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia na]
167776	ATU029 716	ATL8C3 2234:1 ..675	nap			ATL8C3 2234:1 49..67 5	0.56	g28303 9	57	359	1.4e- 26	gene iojap protei n - maize [Zea

167777	ATU029 717	ATL8C4 5676:6 95..1	nap				ATL8C4 5676:6 95..32	0.56	g44902 96	57	434	2.5e- 58	mays] (AL035 678) hypoth etical protei n [Arabi dopsis thalia na]
167778	ATU029 718	ATL8C4 8172:9 74..1	nap				ATL8C4 8172:7 10..44 9	0.52	g28275 48	57	468	2.7e- 35	(AL021 635) cytoch rome P450 - like protei n [Arabi dopsis thalia na]
167779	ATU029 719	ATL8S2 9822:5 08..46	nap				ATL8S2 9822:4 28..46	0.52	g14085 76	57	163	2.5e- 15	(U3197 8) alkyl hydrop eroxid e reduct ase C [Mycob acteri um smegma tis]
167780	ATU029 720	ATL8C1 186:16 8..784	nap				ATL8C1 186:16 8..680	0.51	g47139 51	57	270	1.2e- 21	(AC007 293) hypoth etical

167781	ATU029 721	ATL8C4 1889:7 94..14 8	nap					ATL8C4 1889:6 77..14 8	0.51	g47538 89	57	454	5.3e- 37	prote n [Arabi dopsis thalia na] (AJ005 761) Tpv2- 1c [Phase olus vulgar is]
167782	ATU029 722	ATL8C4 6135:3 35..10 98	nap					ATL8C4 6135:3 35..95 6	0.51	g47551 89	57	901	4.2e- 75	(AC007 018) putati ve cytoch rome P450 [Arabi dopsis thalia na]
167783	ATU029 723	ATL8C3 9733:4 80..1	nap					ATL8C3 9733:4 80..12 1	0.51	g17070 16	57	252	1.4e- 19	(U7872 1) cadmiu m- induce d protei n isolog [Arabi dopsis thalia na]
167784	ATU029 724	ATL8S2 0068:1	nap					ATL8S2 0068:4	0.50	g17637 10	57	165	1.3e- 13	(Z8333 7)

167785	ATU029 725	..445	nap				7..427	0.50	g44552 99	57	848	1.4e- 74	highly simila r to phosph otrans ferase system regula tor [Bacil lus subtil is]
		ATL8C4 9268:1 823..7 22					ATL8C4 9268:1 596..7 22						(AL035 528) putati ve protei n [Arabi dopsis thalia na]
167786	ATU029 726	ATL8C1 4433:7 7..105 66	nap				ATL8C1 4433:7 7..105 66	0.50	g44266 10	57	1113	7.5e- 152	(AF096 896) pushov er [Droso phila melano gaster]
167787	ATU029 727	ATL8C3 2889:4 7..214 0	nap				ATL8C3 2889:1 748..2 140	0.49	g21601 41	57	910	2.2e- 90	(AC000 375) Strong simila rity to Tritic um

167788	ATU029 728	ATL8C4 4574:1 ..4129	nap						ATL8C4 4574:1 33..15 15, ATL8C4 4574:2 983..2 720	0.49, 0.65	g49143 18, g33273 95, g33273 90	57, 37 38, 37	2124, 232, 81	1.0e- 196, 2.5e- 16, 6.2e- 07	(AC005 489) F14N23 .4 [Arabi dopsis thalia nal]
167789	ATU029 729	ATL8C3 034:78 6..468	nap						ATL8C3 034:61 0..498	0.47	g40564 19	57	319	4.9e- 19	(AC005 322) T7A14.

167793	ATU029 733	ATL8C8 963:25 74..1	nap					ATL8C8 963:22 73..61	0.46	g45396 60	57	2072	5.6e- 209	(AF061 282) polypr oteins [Sorgh um bicolor r]	erases [Vibri o cholerae]
167794	ATU029 734	ATL8C2 177:15 42..93	nap					ATL8C2 177:15 40..21 2	0.45	g28646 16	57	867	1.9e- 82	(AL021 811) hypoth etical protein [Arabi dopsis thaliana]	
167795	ATU029 735	ATL8S1 5204:1 ..597	nap					ATL8S1 5204:7 1..562	0.45	g26324 27	57	79	0.0011	(Z9910 4) ybbA [Bacillus subtilis]	
167796	ATU029 736	ATL8C3 6555:2 904..1 07	nap					ATL8C3 6555:2 523..1 07	0.44	g22450 11	57	1058	3.0e- 133	(Z9734 1) hypoth etical protein [Arabi dopsis thaliana]	

167797	ATU029 737	ATL8S7 836:63 0..1	nap				ATL8S7 836:60 3..17	0.44	g13224 9	57	333	7.2e- 32	REF PROTEI N [Pseud omonas putida]
167798	ATU029 738	ATL8C4 0838:7 04..11 0	nap				ATL8C4 0838:6 35..11 0	0.43	g48364 03	57	209	6.3e- 16	(AF117 723) seed matura tion protei n PM27 [Glyci ne max]
167799	ATU029 739	ATL8C3 4217:1 ..1165	nap				ATL8C3 4217:4 69..11 65	0.42	g38596 00	57	681	1.4e- 75	(AF104 919) T15B16 .6 gene produc t [Arabi dopsis thalia na]
167800	ATU029 740	ATL8S4 787:58 9..252	nap				ATL8S4 787:58 4..432	0.41	g24988 72	57	103	2.7e- 05	HOLLID AY JUNCTI ON DNA HELICA SE RUVA [Pseud omonas aerugi nosa]
167801	ATU029	ATL8S8	nap						g26337	57	149	1.7e-	(Z9911

167802	741	578:61 4..152								68						13	1) similar to hypothetical proteins from B. subtilis [Bacillus subtilis]
	ATU029 742	ATL8C4 0796:1 130..8 99	nap							g22449 57	57	248				1.1e- 20	(Z9734 0) hypothetical protein [Arabis dopsis thaliana]
167803	ATU029 743	ATL8S2 7117:1 93..69 3	nap						ATL8S2 7117:2 10..65 6	1.00	56	229				1.9e- 24	(AC005 623) unknown protein [Arabis dopsis thaliana]
167804	ATU029 744	ATL8C3 9001:9 75..1	nap							g49030 18	57	562				4.1e- 66	(AB027 507) ACE [Arabis dopsis]

167817	ATU029 757	ATL8C4 1781:1 938..3 47	nap								g33778 16	57	2195	1.0e- 206	thalia na] (AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son Athila (GB:X8 1801) [Arabi dopsis thalia na]
167818	ATU029 758	ATL8C3 3164:6 60..1	nap								g45899 54	57	329	6.7e- 37	(AC007 169) hypo thetical protei n [Arabi dopsis thalia na]
167819	ATU029 759	ATL8S2 203:44 0..1	nap								g32490 87	57	161	1.9e- 16	(AC004 473) Contai ns simila rity to TMV

167822	ATU029 762	ATL8S1 5610:4 24..17 6	nap							g17091 80	57	184	1.3e- 10	TRANSC RIPTIO NAL REGULA TORY PROTEI N MUCR [Rhizo bium melilo til]	[Arabi dopsis thalia na]
167823	ATU029 763	ATL8C8 292:48 9..114 6	nap							g22450 79	57	342	5.0e- 38	(Z9734 3) hypoth etical protei n [Arabi dopsis thalia na]	
167824	ATU029 764	ATL8C1 2406:4 90..93 0	nap							g21296 34	57	149	1.8e- 10	lectin -like protei n - Arabid opsis thalia na [Arabi dopsis thalia na]	
167825	ATU029 765	ATL8S2 6110:1 ..528	nap							g26336 95	57	383	1.1e- 30	(Z9911 0) simila	

167833	ATU029 773	ATL8C3 3416:1 772..2 33	nap							g47739 08	57	1400	1.3e- 141	(AF147 259) No defini tion line found [Arabi dopsis thalia nal]
167834	ATU029 774	ATL8C2 5846:2 465..1 07	nap							g42635 43, g36953 99	57, 41	1255, 706	4.8e- 121, 9.2e- 90	(AC006 250) putati ve Athila retroe lement ORF1 protei n [Arabi dopsis thalia nal]; (AF096 372) contai ns simila rity to Arabid opsis

167835	ATU029 775	ATL8C4 5329:6 05..1	nap										g44173 07	57	651	6.1e- 59	(AC006 446) putati ve pol polypr oteins [Arabi dopsis thalia na]	thalia na retrot ranspo son Athila. (GB:X8 1801) [Arabi dopsis thalia na]
167836	ATU029 776	ATL8C1 4876:1 168..1	nap										g33954 26	57	1063	1.6e- 90	(AC004 683) unknown protein [Arabi dopsis thalia na]	thalia na retrot ranspo son Athila. (GB:X8 1801) [Arabi dopsis thalia na]
167837	ATU029 777	ATL8C1 6349:9 10..40	nap										g24987 31	57	673	5.8e- 67	PROBAB LE NADP- DEPEND ENT OXIDOR EDUCTA SE P1	thalia na retrot ranspo son Athila. (GB:X8 1801) [Arabi dopsis thalia na]

167842	ATU029 782	ATL8C2 3916:3 555..1	nap										g42638 31	57	3398	3.3e- 292	dopsis thalia nal (AC006 067) putati ve revers e transc riptas e [Arabi dopsis thalia nal]
167843	ATU029 783	ATL8C1 1287:2 901..4 23	nap										g33193 60	57	2091	3.6e- 161	(AF077 408) contai ns simila rity to Vicia faba retrot ranspo son- like gene (GB:AB 007467) [Arabi dopsis thalia nal]
167844	ATU029 784	ATL8C4 8558:1 ..1144	nap										g49268 20	57	132	5.5e- 09	(AC004 135) T17H7.

167850	ATU029 790	ATL8C2 2343:2 047..1	nap							g44327 94	57	2472	1.8e- 241	(AC006 437) putative Tnp2 Taml transp oson protein [Arabi dopsis thalia na]
167851	ATU029 791	ATL8S2 1633:1 ..528	nap							g45593 20	57	153	2.8e- 06	(AC007 087) putative 50S ribosomal protein L1 [Arabi dopsis thalia na]
167852	ATU029 792	ATL8S3 0672:4 94..1	nap							g38450 64	57	181	1.8e- 16	(U3972 8) ABC transp orter, ATP- binding protein [Mycop lasma genitalium]
167853	ATU029	ATL8S1	nap							g42637	57	247	3.8e-	(AC006)

167857	ATU029 797	ATL8C3 7095:6 08..1	nap							g42493 87	57	755		gene name: yml; simila r to hypoth etical protei ns [Bacil lus subtil is]
167858	ATU029 798	ATL8S2 4991:6 35..1	nap						ATL8S2 4991:5 90..41 5	0.99	56	745	9.4e- 69	(AC005 966) Simila r to [Arabi dopsis thalia na]
167859	ATU029 799	ATL8C2 1909:1 252..5 53	nap						ATL8C2 1909:1 137..5 56	0.99	56	547	1.1e- 59	(AC005 499) hypoth etical protei n [Arabi dopsis thalia na]
167860	ATU029 800	ATL8C3 6552:1 ..531	nap						ATL8C3 6552:1 18..53	0.98	56	78	0.19	(Z9338 2) F45G2.

167864	ATU029 804	..839	ATL8C1 7716:1 ..2204	nap					2..839	0.95	g47411 95	56	2268	2.8e- 217	putative protein [Arabidopsis thaliana]
			ATL8C1 7716:3 58..22 04												(AL049 746) ABC transp orter- like protein [Arabidopsis thaliana]
167865	ATU029 805	ATL8C5 642:1. .924	nap						ATL8C5 642:19 5..906	0.95	g36881 76	56	293		(AL031 804) putative protein [Arabidopsis thaliana]
167866	ATU029 806	ATL8C2 695:1. .1113	nap						ATL8C2 695:12 ..959	0.94	g18711 76	56	264	7.6e- 12	(U9043 9) unknown protein [Arabidopsis thaliana]

167867	ATU029 807	ATL8C3 1415:2 794..1	nap				ATL8C3 1415:2 710..9 55	0.94	g43357 21, g43357 20	56, 36	394, 1530	1.2e- 29, 1.7e- 136	(AC006 248) putati ve zinc- finger protei n [Arabi dopsis thalia nal; (AC006 248) putati ve revers e transc riptas e Tal- 1 [Arabi dopsis thalia nal]
167868	ATU029 808	ATL8C1 8929:1 ..1576	nap				ATL8C1 8929:1 18..14 76	0.91	g33778 16	56	2252	8.2e- 192	(AF076 275) contai ns simila rity to Arabid opsis thalia na retrot ranspo son

167869	ATU029 809	ATL8C6 22:657 ..2050	nap					ATL8C6 22:134 7..188 3	0.91	g43888 25	56	933	8.2e- 91	Athila (GB:X8 1801) [Arabi dopsis thalia na] (AC006 528) putati ve pol polypr oteins with revers e transc riptas e domain (Pfam: PF0007 8) [Arabi dopsis thalia na]
167870	ATU029 810	ATL8C1 8424:1 ..1300	nap					ATL8C1 8424:2 27..13 00	0.90	g32128 54	56	132	3.4e- 09	(AC004 005) unknow n protei n [Arabi dopsis thalia na]
167871	ATU029 811	ATL8S4 606:1. .483	nap					ATL8S4 606:68 ..466	0.90	g31584 76	56	611	1.9e- 58	(AF067 185) aquapo

167872	ATU029 812	ATL8C7 653:1. .930	nap						ATL8C7 653:27 ..930	0.89	g11711 61	56	790	2.8e- 51	rin 2 [Saman ea saman] (U4147 2) pectat e lyase homolo g [Medic ago sativa]
167873	ATU029 813	ATL8C2 2958:3 07..13 89	nap						ATL8C2 2958:6 12..10 18	0.89	g16214 67	56	514	3.0e- 54	(U7310 6) laccas e [Lirio dendro n tulipi feral]
167874	ATU029 814	ATL8C9 908:1. .1506	nap						ATL8C9 908:28 8..144 7	0.88	g40069 05	56	1441	7.2e- 116	(Z9970 8) ATPase -like protei n [Arabi dopsis thalia nal]
167875	ATU029 815	ATL8C1 3091:1 ..3434	nap						ATL8C1 3091:1 98..34 34	0.87	g23160 16	56	1638	2.2e- 129	(U9265 0) MRP- like ABC transp

167876	ATU029 816	ATL8C3 6464:1 ..646	nap					ATL8C3 6464:3 64..63 9	0.87	g34136 99	56	385	9.5e- 39	orter [Arabi dopsis thalia na] (AC004 747) putati ve heat shock protei n [Arabi dopsis thalia na]
167877	ATU029 817	ATL8C1 424:79 7..503 7	nap					ATL8C1 424:79 7..491 4	0.86	g43888 31	56	1940	1.3e- 206	(AC006 528) putati ve mudrA transp osase protei n [Arabi dopsis thalia na]
167878	ATU029 818	ATL8C2 0841:1 36..24 20	nap					ATL8C2 0841:1 420..2 408	0.85	g37383 28	56	607	1.2e- 47	(AC005 170) putati ve serine carbox ypepti dase [Arabi dopsis thalia na]

167879	ATU029 819	ATL8C3 1249:1 176..5 64	nap					ATL8C3 1249:1 068..5 64	0.84		g45858 77	56	182	5.7e- 19	thalia na] (AC005 850) Hypoth etical protei n [Arabi dopsis thalia na]
167880	ATU029 820	ATL8S1 4503:1 ..686	nap					ATL8S1 4503:1 20..68 6	0.84		g77774 7	56	244	3.9e- 22	(L4166 7) ORF1 [Photo bacter ium sp.]
167881	ATU029 821	ATL8C4 4687:2 246..3 176	nap					ATL8C4 4687:2 467..3 058	0.83		g29795 48	56	647	1.8e- 48	(AC003 680) putati ve 7- ethoxy coumar in O- deethy lase [Arabi dopsis thalia na]
167882	ATU029 822	ATL8C1 5647:5 00..1	nap					ATL8C1 5647:4 29..30	0.83		g45586 67	56	207	5.3e- 24	(AC007 063) hypoth etical protei n [Arabi dopsis

167883	ATU029 823	ATL8C4 0993:8 64..1	nap				ATL8C4 0993:7 85..46 0	0.83	g29824 48	56	878	8.3e- 69	thalia nal (AL022 224) putati ve protei n [Arabi dopsis thalia nal]
167884	ATU029 824	ATL8S8 500:24 3..501	nap				ATL8S8 500:24 6..406	0.82	g46470 7	56	231	1.3e- 22	40S RIBOSO MAL PROTEI N S18 [Arabi dopsis thalia nal]
167885	ATU029 825	ATL8C4 6293:1 ..718	nap				ATL8C4 6293:2 88..71 8	0.82	g31933 32	56	812	4.1e- 34	(AF069 299) simila r to Arabid opsis At- hook protei n 1 (GB:AJ 222585) [Arabi dopsis thalia nal]
167886	ATU029 826	ATL8C4 1963:9	nap				ATL8C4 1963:9	0.81	g46626 45,	56, 46	938, 448	2.2e- 77,	(AC006 429)

167888	ATU029 828	ATL8C1 686:34 1..215 6	nap						ATL8C1 686:34 5..143 0	0.80	g48742 66	56	428	2.3e- 31	(GB: AC0023 41); nearly identi- cal, may be the same protei- n [Arabi- dopsis thalia na]
167889	ATU029 829	ATL8C1 3587:1 492..1	nap						ATL8C1 3587:1 002..1 8	0.80	g45390 04	56	1162	2.9e- 125	(AC007 354) T16B5. 4 [Arabi- dopsis thalia na]
167890	ATU029 830	ATL8C3 5262:1 ..1252	nap						ATL8C3 5262:3 ..1171	0.79	g45875 95	56	213	9.0e- 20	(AL049 481) putati- ve protei- n kinase [Arabi- dopsis thalia na]
															(AC006 951) putati- ve prolin- e-rich

167891	ATU029 831	ATL8S2 2998:4 70..1	nap					ATL8S2 2998:3 95..32	0.78	g4l071 50	56	81	1.4e- 05	protein APG [Arabi dopsis thalia na]
167892	ATU029 832	ATL8C4 7652:1 090..1	nap					ATL8C4 7652:1 090..1 38	0.78	g40469 0	56	381	6.0e- 35	(L1907 5) cytoch rome P450 [Catha ranthu s roseus]
167893	ATU029 833	ATL8C4 834:31 59..1	nap					ATL8C4 834:31 28..58	0.78	g45220 05	56	1959	1.6e- 193	(AC007 069) putati ve revers e transc riptas e [Arabi dopsis thalia na]
167894	ATU029	ATL8C2	nap					ATL8C2	0.78	g44067	56	1272	2.4e-	(AC006

834	3015:1 ..1530					3015:1 94..11 21	83				137	532) putati ve glutam ate decarb oxylas e [Arabi dopsis thalia na]
167895	ATU029 835	nap				ATL8C2 4495:1 049..1 85	g43253 38	56	1359	3.2e- 91	(AF128 392) No defini tion line found [Arabi dopsis thalia na]	
167896	ATU029 836	nap				ATL8S3 0338:5 12..42 1	g73080 5	56	140	1.5e- 12	ALKALI NE PHOSPH ATASE SYNTHE SIS TRANSC RIPTIO NAL REGULA TORY PROTEI N SPHR [Synec hococc us sp.]	

167897	ATU029 837	ATL8C4 6857:1 ..1169	nap				ATL8C4 6857:9 15..73 7	0.76	g31932 94	56	1066	8.6e- 110	(AF069 298) simila r to revers e transc riptas es (Pfam: rvt.hm m, score: 53.76) [Arabi dopsis thalia na]
167898	ATU029 838	ATL8C4 9516:1 ..1233	nap				ATL8C4 9516:1 10..10 84	0.76	g42043 15	56	990	4.7e- 84	(AC003 027) Unknow n protei n [Arabi dopsis thalia na]
167899	ATU029 839	ATL8C4 9802:1 ..1653	nap				ATL8C4 9802:7 20..16 53	0.76	g45809 90	56	433	1.4e- 49	(AF120 335) putati ve transp osase [Arabi dopsis thalia na]
167900	ATU029 840	ATL8C4 9984:1	nap				ATL8C4 9984:1	0.76	g41917 92	56	212	9.1e- 24	(AC005 917)

167901	ATU029 841	ATL8C2 7000:1 229..1	nap					368..3 89	0.75	g35496 72	56	571	4.3e- 27	(AL031 394) putati ve protei n [Arabi dopsis thalia na]
167902	ATU029 842	ATL8C2 4553:6 90..1	nap					ATL8C2 4553:6 45..43	0.75	g44688 06	56	552	2.0e- 56	(AL035 601) cytoch rome P450 monoox ygenas e-like protei n [Arabi dopsis thalia na]
167903	ATU029 843	ATL8C1 7364:3 184..9 52	nap					ATL8C1 7364:3 157..1 996	0.74	g43357 20	56	1339	1.1e- 114	(AC006 248) putati ve revers e transc riptas

167904	ATU029 844	ATL8C4 0265:1 537..4 80	nap					ATL8C4 0265:1 419..4 80	0.74	g44067 96	56	800	1.4e- 58	(AC006 304) hypoth etical protei n [Arabi dopsis thalia na]
167905	ATU029 845	ATL8S3 0898:1 ..584	nap					ATL8S3 0898:1 00..51 6	0.74	g11744 98	56	160	2.3e- 14	SYNAPT OBREVI N- RELATE D PROTEI N [Arabi dopsis thalia na]
167906	ATU029 846	ATL8C4 8800:1 ..1497	nap					ATL8C4 8800:9 ..1336	0.74	g39253 63	56	627	1.2e- 56	(AF067 961) homeod omain protei n [Malus domest ica]
167907	ATU029 847	ATL8C2 9097:1 018..1	nap					ATL8C2 9097:9 29..17 1	0.73	g36458 98	56	1489	9.0e- 132	(U6840 8) in- frame stop

167908	ATU029 848	ATL8C2 7434:1 ..1163	nap					ATL8C2 7434:3 32..11 63	0.72	g14049 9	56	200			codon; possibly a post- transp osition mutation [Zea mays]
167909	ATU029 849	ATL8C2 3974:1 ..1462	nap					ATL8C2 3974:9 5..136 1	0.72	g45393 94	56	974	1.4e- 98	(AL035 526) putative protein [Arabidopsis thaliana]	
167910	ATU029	ATL8C3	nap					ATL8C3	0.72	g47551	56	233	3.2e-	(AC007	

	850	6761:1 240..3 01							6761:1 240..9 67		99				17	018) hypothe- tical protein [Arabi- dopsis thalia na]
167911	ATU029 851	ATL8C4 85:3.. 1503	nap						ATL8C4 85:68. .1468	0.72	g44163 01	56	1904	4.8e- 168	(AF105 716) gag protein [Zea mays]	
167912	ATU029 852	ATL8C3 933:1. .590	nap						ATL8C3 933:59 ..590	0.72	g30045 49	56	264	2.0e- 24	(AC003 673) unknown protein [Arabi- dopsis thalia na]	
167913	ATU029 853	ATL8C1 3296:1 672..1	nap						ATL8C1 3296:1 543..4 10	0.71	g44173 09	56	1318	4.8e- 133	(AC006 446) putati- ve poly- protein with a reverse transc- riptase domain [Arabi- dopsis thalia na]	

Figure 1. The effect of the concentration of the monomer on the polymerization of 1. The polymerization was carried out at 60°C for 24 h in the presence of 0.01 mol/L of the initiator. The concentration of the monomer was 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, and 1.0 mol/L. The polymerization was carried out in the presence of 0.01 mol/L of the initiator. The concentration of the monomer was 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, and 1.0 mol/L. The polymerization was carried out in the presence of 0.01 mol/L of the initiator. The concentration of the monomer was 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, and 1.0 mol/L.

167914	ATU029 854	ATL8C4 3785:1 ..1294	nap					ATL8C4 3785:9 7..120 9	0.69	g48951 73	56	637			dopsis thalia na]
167915	ATU029 855	ATL8C4 827:33 89..20 35	nap					ATL8C4 827:32 37..20 66	0.69	g41730 5	56	403	7.6e- 26		(AC007 662) hypoth etical protei n [Arabi dopsis thalia na]
167916	ATU029 856	ATL8C4 2414:1 334..1	nap					ATL8C4 2414:1 307..4 0	0.68	g33778 45	56	560	5.4e- 45		MANNOS YL- OLIGOS ACCHAR IDE ALPHA- 1,2- MANNOS IDASE (MAN(9) - ALPHA- MANNOS IDASE) [Sacch aromyc es cerevi siae]
															(AF076 274) contai ns simila rity to the basic

167917	ATU029 857	ATL8C4 7990:2 416..5 35	nap					ATL8C4 7990:2 187..5 51	0.67	g22889 97	56	1384	4.7e- 115	region plus leucin e zipper trancr iption factor s (Pfam: bZIP.h mm, score: 12.77) [Arabi dopsis thalia na]
167918	ATU029 858	ATL8C2 898:27 2..135 2	nap					ATL8C2 898:27 2..130 5	0.67	g24438 92	56	500	2.6e- 53	(AC002 294) Hypoth etical protei n [Arabi dopsis thalia na]
167919	ATU029 859	ATL8C3 2621:1	nap					ATL8C3 2621:1	0.67	g47536 58	56	778	1.5e- 77	(AL049 751) Hypoth etical protei n [Arabi dopsis thalia na]

167920	ATU029 860	39..17 72	nap					39..17 40	0.67		g29245 23	56	587	1.4e- 61	(AL022 023) putati ve protei n [Arabi dopsis thalia nal]
167921	ATU029 861	ATL8C4 4080:1 733..1	nap					ATL8C4 4080:1 733..8 9	0.66		g43253 77	56	254	4.7e- 25	(AF128 396) simila r to maize transp oson MuDR- like protei ns [Arabi dopsis thalia nal]
167922	ATU029 862	ATL8S1 2762:1 ..681	nap					ATL8S1 2762:2 4..630	0.66		g14210 39, g40334 81	56, 31	243, 318	8.5e- 20, 5.7e- 30	Chain A, 5- Carbox ymethy l-2- Hydrox ymucon